

A history of dairy journalism in
the United States: 1810-1950.

070.486 S33h

58-03612

Schlebecker \$6.00

A history of dairy journalism in
the United States: 1810-1950.

kansas city



public library

kansas city, missouri

Books will be issued only
on presentation of library card.
Please report lost cards and
change of residence promptly.

Card holders are responsible for
all books, records, films, pictures
or other library materials
checked out on their cards.

1. \mathbb{R}^n is a vector space over \mathbb{R} with the usual addition and scalar multiplication. The dimension of \mathbb{R}^n is n . The standard basis for \mathbb{R}^n is $\{e_1, e_2, \dots, e_n\}$ where $e_i = (0, \dots, 1, \dots, 0)$ with 1 in the i -th position.

5X

[illegible]

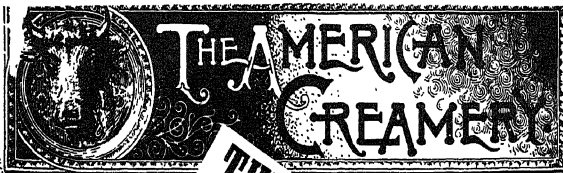
A History of Dairy Journalism in the United States
1810-1950

HOARD'S DAIRYMAN.

Devoted to Dairying and Dairy Stock Interests.

PRICE FIFTEEN CENTS. NOVEMBER 17, 1894.

THE KING OF THE CREAMERY.
Can a camel walk through
the eye of a needle, can
a dairyman make five cents
a quart? SHARPER, BUSHMAN
the whole lot



DEVOTED TO

THE CREAMERIES OF AMERICA.

VOL. 4, NO. 1.

The Jump Relative Value Creamery

BY J. N. HENRY.

This was the first western creamery, and the second in the United States, to adopt the relative value plan of butter making. It was organized in February 1888, with a capital stock of \$100,000, and has since that time been purchasing

letter

to J

Value

THE

AGRICULTURAL MUSEUM.

ON THE PEROT AVENUE, WASH.

Georgetown, Co. July 4, 1890.

Vol. 11

INTRODUCTION.

In presenting the public with the first number of the AGRICULTURAL MUSEUM, without having previously secured or obtained a single subscriber, it may be supposed that the Editor has calculated too largely on the liberality of his friends and fellow citizens. It may be so. Still, however, he would not be discouraged. This has not been the principal source on which he has relied for support. His dependence is rather on the advantages which such a Publication promises to the community than on their liberality.

For some time past, considerable exertion has been made throughout the UNITED STATES, and to encourage and improve the AGRICULTURE. No has the exertion extended to the most advanced and successful. The success has equalled the most sanguine expectations. By the adoption of proper modes of culture the thousands of acres of waste and barren lands have been clothed with a rich abundance; the desert has been literally changed into a fruitful field—large and profitable. Millions of various kinds have been established, not only to feed, but to clothe themselves from the produce of their own farms. Such a state of things may well be considered

KIMBALL'S DAIRY FARMER.

FOR THE NEW YORK COUNTRY.

THE DAIRYMAN'S RECORD.

Vol. 11, No. 1, February 15, 1890.

Georgetown, Co. July 4, 1890.

Vol. 11

INTRODUCTION.

more every day are directed the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

the number of the subscribers to the greater

A History of
DAIRY JOURNALISM
in the United States
1810-1950

John T. Schlebecker and Andrew W. Hopkins

The University of Wisconsin Press
Madison

1957

Published by the University of Wisconsin Press,
430 Sterling Court, Madison 6, Wisconsin

Copyright © 1957 by the Regents of the University
of Wisconsin. Copyright, Canada, 1957

Distributed in Canada by Burns and MacEachern,
Toronto

Printed in the United States of America
by Cushing-Malloy, Inc., Ann Arbor, Michigan

Library of Congress Catalog Card Number 57-9810

Before thoughts can have force and effect action,
they must be presented in simple and direct form.
Too often ideas—both new and old—are presented
in complex form or obscure language. To be useful
ideas need to be restated or interpreted, and repeated.

Acknowledgments

The authors wish to thank all who have helped to make possible this survey of the American dairy press from its humble and sometimes feeble beginnings to its present wider coverage of the dairy industry.

They are especially indebted to William J. Hagenah, George I. Haight, former Governor Oscar Rennebohm, and the University of Wisconsin Foundation, who financed the survey. These industrial and professional leaders recognized the important relationship of the dairy industry to the agricultural and general economy of the dairy states and the nation. They, too, were aware of the important place which dairy products should be given in the adequate nutrition of healthy people.

The authors also thank Professors Vernon Carstensen of the History and Agricultural Economics Departments and Bryant Kearn of the Agricultural Journalism Department, University of Wisconsin, for much valuable counsel and helpful coöperation.

Officials of each of the national dairy breed associations—Ayrshire, Brown Swiss, Guernsey, Holstein-Friesian, and Jersey—have encouraged the study, as have leading dairy producers and processors throughout the country. It would be difficult, indeed, to list all of the individuals by name. However, their number has been many and their help most valuable.

Librarians in colleges of agriculture and the United States Department of Agriculture have rendered invaluable service in making available for examination rare and valuable volumes. Perhaps it would be fair to single out for special mention Clarence S. Hean, Emory M. Pittenger, and Marguerite Christensen of the University of Wisconsin and Angelina Carabelli of the United States Department of Agriculture.

Publishers of various journals, too, have been most helpful in supplying authoritative information on their respective publications. Taken all together this has been a coöperative effort in which many have taken part. Acknowledgment is due all of them.

Contents

Acknowledgments	vii
List of Illustrations	xi
Introduction	3
1 The General Farm Paper, 1810-1859	6
2 The First Efforts in Dairy Journalism, 1852-1862	24
3 Trade, Breed, and Farm Journals, 1862-1883	42
4 The Dairy Farm Journals, 1883-1885	56
5 Technical and Trade Journals, 1885-1892	71
6 The Depression of the Nineties, 1893-1895	93
7 Depression, Westward Expansion, and Prosperity, 1896-1901	112
8 New Competition for the Older Journals, 1901-1905	133
9 Local Dairy Journals, 1906-1909	151
10 Prosperity and the War, 1910-1918	177
11 Agricultural Depression, 1919-1929	203
12 The Great Depression and After, 1930-1941	227
13 Dairy Journals and a Planned Economy, 1942-1950	250
14 Sketches of Typical or Unique Dairy Journals	274
15 Conclusions	298
Appendix	305
Notes	313
Bibliography	384
Index	391

List of Illustrations

Collection of journal mastheads	frontispiece
A dairy cow of the early nineteenth century	<u>facing page</u> 14
Early type of Jersey	15
Contents page of Volume I of the <u>Dairy Farmer</u>	32
Continuation of contents page	33
Advertisement page from 1887 <u>Jersey Bulletin</u>	58
Jesup Relative Value Creamery	59
<u>between pages 174 and 175</u>	
Oleomargarine cartoon	
W. D. Hoard	
Dennis H. Jenkins	
Thomas D. Cutler	
X. A. Willard	
Frederick Lowell Houghton	
L. B. Arnold	
Milk trust cartoon	
Oleomargarine editorial from 1950 <u>Hoard's Dairyman</u>	262
The cow, with Hoard's quotation	302

A History of Dairy Journalism in the United States
1810–1950

Introduction

Since the invention of printing, journalists have generally assumed the task of interpreting and translating new ideas for the people. In this way ideas often have entered the common consciousness and become the basis for political, economic, and social action. The goal of this work is to indicate the connection between ideas and economic reality, to show how and to what extent journalists in their roles as interpreters and translators have influenced the development of the American dairy industry.

It should be recognized that dairying has long been a significant part of our agricultural enterprise and as such has been important in the development of American society. The journalist has at times exerted much influence upon the development of dairying and, therefore, upon agriculture in particular and society in general. Thus, if history is, in truth, concerned with all the people, then the development of such enterprises as dairying has been highly important and the role of the journalist significant. Of course, it is not possible to include in this survey the work of more than the more important writers and thinkers. The primary object is to explain how through various types of journals ideas on dairying have been made available.

This survey is intended to trace the development of dairy journalism from 1810, when the first agricultural periodical appeared, to 1950, when the farm publication field seemed to have become rather well stabilized. Because of limitations of time and space, the account is restricted primarily to those journals which began publication before 1911. Ninety-two separate dairy periodicals are covered, in addition to ten early general farm papers. Dairy journals which began publication after 1910 have been listed in the various appendixes, and total slightly more than seventy titles.

The primary purpose of this study has been to discover how dairy journalists interpreted ideas, passed along infor-

mation, and thus influenced the development of the American dairy industry. An attempt has been made to present a chronological account of the several dairy journals, indicating their range of subject matter and emphasizing those topics which particularly interested the various editors. Changes in editorial ideas and approaches have been noted, and some effort has been made to measure the influence of the various periodicals on farmers, distributors, processors, and legislators.

This work is not directly concerned with those who have contributed to the development of dairying in the United States unless they were journalists. The publications of the United States Department of Agriculture or of the various state experiment stations are considered but incidentally. These publications generally appeared irregularly and were frequently of slight value to dairy farmers and processors until the information had been presented in less technical language. One of the chief services of the dairy journalists was that of translation and interpretation of these and other learned publications.


And the editors performed other tasks. Although they were few in number, the dairy journalists conditioned the course of several events in American history by virtue of their influence on the members of a large and significant industry. From 1840 to 1950, dairying consistently increased in importance as a branch of agriculture. In 1900, dairying provided the major income for 357,578 or 6 per cent of all farms, and in 1939, for 619,006 or 10 per cent of all farms. And of course, even more farmers kept some cows. In 1900, 78.7 per cent of all farms produced some milk, and in 1939, 76.5 per cent. There seems no way of determining the exact importance of this incidental dairying upon the farmers involved or upon the public. There can be little question but that dairying was clearly a significant part of American agriculture. Furthermore, the influence of the dairy press was felt outside dairying and agriculture. In addition, dairy farming has always tended to reduce soil depletion and even increased soil fertility when manure was saved, supplemented, and properly applied. Dairy farming also tended to result in careful management of meadows and pastures and thus reduced erosion in dairy regions. Journalists generally influenced these contributions to American well-being. By urging the adoption of good farm practices, dairy journals not only encouraged the spread of dairying by making it more profitable but also reduced waste of natural resources.

By encouraging more efficient farm and factory management, the journalists also helped reduce the cost of dairy products and thus made them available for more people. The editors also fought fraud and deception wherever they found it, and their campaigns helped secure government regulation of railroads, meat packers, and various agricultural processing industries. In short, directly or indirectly, the dairy press helped direct the course of several events in American history.

In preparing this history of dairy journalism, every volume of each journal was examined when the periodical lived from one to five years. In the case of journals with long runs, the first and last volumes and about every fifth volume in the series was read. In addition, volumes were read when they contained information on changes in editors, frequency of publication, or size of journal. An attempt was made to examine several periodicals for every year between 1852 and 1950. It was not possible to read every volume of every journal considered. And often it was impossible to find copies of the more obscure journals.

In order to get a large cross section of editorial opinion on important events in American history, many publications were read for years such as 1893 (the panic and the Columbian Exposition), 1898 (the Spanish-American War), or 1907 (the panic). While the research on any particular journal might sometimes be inadequate to write a comprehensive history of that magazine, a large amount of information was accumulated on all journals.

In addition to reading the journals concerned, use was made of other primary sources when available, such as Ayer's American Newspaper Directory. Letters and questionnaires were sent to editors of journals requesting information on the history of their magazines, and when appropriate the replies to these requests were used. Secondary sources were not abundant but were used when possible to supply information not otherwise available.



Chapter I - The General Farm Paper 1810-1859

Rapid Progress Made in Farming

One dairy journal, the Western Reserve Farmer and Dairyman, of Jefferson, Ohio, appeared before 1859. This and subsequent dairy journals were preceded by quite a few general farm papers, by many agricultural societies, and by numerous country newspapers. Between 1810 and 1859 the general agricultural papers carried dairy information which the dairy journals later covered. Agricultural societies sometimes fostered dairy journals and in their reports and records of transactions frequently published dairy information. Often the country newspapers provided the presses and the publishers for dairy journals. This development was illustrated by the Dairyman's Record of Little Falls, New York, which began in 1859 as an adjunct of the Mohawk Courier. Similarly, Hoard's Dairyman of Fort Atkinson, Wisconsin, began in 1885 as a supplement to the Jefferson County Union.

When the first American farm paper appeared in 1810, a vast fund of agricultural lore had been accumulated.¹ Moreover, in the ensuing years a host of new techniques in farming and transportation were developed. New and changing information invited publication and contributed generously to the development of the general farm paper. Farming changed greatly between 1810 and 1859. In 1810 the iron plow and steel-tipped harrow were virtually the only farm implements moved by animal power. During the next half century there appeared horse-drawn reapers, grain drills, mowers, and self-raking reapers. In dairying the old dash churn gave way to those powered by dogs, sheep, horses, or oxen. The labor thus saved could be used to cultivate more land or churn more butter and as a result produce more at lower cost. This increased productiveness made it possible

for the farmer to concentrate on one or two commercial crops which when sold yielded far more than mere subsistence.² The gradual change to commercial farming was natural, since the farm could easily produce much more than the immediate family could use. Between 1810 and 1850 eastern farmers came to specialize in dairy and truck farming, partly because they could not meet western competition in producing small grains and livestock and partly because the increasing size of cities offered more profitable markets for perishable foods.

Areas Develop Different Specialties

To a certain extent, farmers in various sections of the country were already specializing by 1810. The South was engaged in tobacco and cotton production, based on slave labor. The southern farmers made some use of the new machinery, particularly the cotton gin, but as a rule the yeoman farmer was too poor and the plantation owner too preoccupied with cotton to make extensive use of laborsaving devices. In most years cotton was too profitable to permit an interest in dairying.³ Furthermore, there were few southern cities which offered large enough markets to entice farmers into commercial dairying.

The West, between 1810 and 1860, with its constantly moving frontier, was devoted to the production of staple crops and products such as grain, wool, hides, tallow, and meat. Dairy products were produced only in small amounts, for home use or for local trade.⁴ Western farmers offered no serious competition to eastern dairymen until after the Civil War.

Between 1810 and 1860 the states north of the Ohio increased in population from 272,000 to 6,927,000, advancing from 4 to 24 per cent of the national total. At the same time, the area embracing Missouri, Iowa, Minnesota, and the Dakotas increased in population from 20,000 in 1810 to 2,170,000 in 1860. In the same region the number of farms increased from 69,420 in 1850 to 172,259 in 1860.⁵ These hordes of farmers, with steel plows, reapers, and threshers upset the old agricultural balance and threatened to impoverish eastern farmers. In response, the easterners used more fertilizer, abandoned marginal land, and turned for additional income to truck and dairy farming.⁶

Meanwhile, the cities of the United States were growing rapidly. In 1810 Philadelphia had a population of about 50,000, but by 1860 had grown to over 500,000. New York,

which in 1810 had nearly 100,000, had increased to well over 800,000 in 1860. Cities in the West which had been either negligible or nonexistent in 1810 exhibited unusual growth between 1850 and 1860. Chicago in 1850 had a population under 50,000, but by 1860 had more than doubled. St. Louis increased even faster. From an insignificant number in 1840, it increased to over 60,000 in 1850 and by 1860 had grown to 150,000.⁷

The expansion of the West and the growth of the cities were accompanied by improvements in transportation during the period 1810-59. The Cumberland Road, completed in 1818, gave the farmers of the Ohio country an opening for their produce at Baltimore. This was only one of the many roads which opened up the West and presented the farmers with profitable eastern markets. In 1817 work was begun on the Erie Canal and was completed by 1825. The canal provided cheaper and faster transportation than did roads, and consequently the regions of western New York and eastern Ohio were given advantages in marketing over other areas. New York, Pennsylvania, and the states north of the Ohio built subsidiary canals connecting the Great Lakes and the Ohio. These canals all increased the flow of products to New York. During the period 1810-59, growing steamboat traffic on lake and river also expanded the eastward flow of western products. This also forced farmers of the older agricultural regions to shift away from the production of staple commodities.

Then, too, between 1830 and 1860 American railroads increased in number and mileage. In 1840 there were 3,000 miles of track, most of it in the East. By 1850 the total railroad mileage had reached 9,000.⁸ Farmers along the rail lines could ship milk and other dairy products directly to the metropolis at a fair profit, and at the same time, the new roads speeded the eastward movement of staples.⁹

Research Helps Solve Farm Problems

These years witnessed changes in attitude toward agricultural experimentation. In 1810 agricultural experiments were on an amateur basis. By 1840, problems were more carefully limited, variable factors were often controlled or accounted for, and results, if any, were rechecked.

The movement from amateur to formal experimentation was given impetus by the rise of agricultural societies. These societies increased in membership and multiplied in number between 1810 and 1840. The individual farmer no

longer depended entirely upon his efforts and a scattered correspondence with prominent farmers. He could now draw on the experience of fellow farmers of his vicinity by attending meetings or reading the transactions of his society. In addition, the early societies tended to increase interest in experimentation.

At the same time, agricultural societies began and propagated the county fair which soon spread across the country. The first such fair was inspired by Elkanah Watson, who in 1807 exhibited Merino sheep at Pittsfield, Massachusetts. These fairs brought the latest discoveries or developments to the attention of farmers. Besides, they invited criticism of ideas and practices, new or old, and tended to keep theorists in check. Since the county fairs and the agricultural societies were so closely linked, their fortunes rose and fell together.¹⁰

Another service of the agricultural societies was the dissemination of information by means of transaction records and newspapers. Many of the early farm journals were organs for the early agricultural societies. Insofar as the papers circulated beyond the members of the sponsoring organization, they also increased the general knowledge of agriculture.

State aid to agricultural societies began when New Hampshire gave money to its various county organizations. Other states soon followed the New Hampshire example, but the repeal of public aid in the twenties and thirties plus the depression of 1837 brought about the collapse of most of these societies.¹¹ Farmers were not disinterested in experimentation and improvement, but they could not afford novelties during a depression.

Agricultural Societies Publish Farm Journals

Not all of the societies died during the thirties and forties, and with the return of better prices in the late 1840's these were rapidly revived. Others which had been dormant also came to life shortly after the return of prosperity. They continued and expanded their earlier activities, among which was the support and publication of agricultural journals.

The English shift to free trade and the repeal of the Corn Laws was accompanied by expanded American commerce. Internal agricultural commerce also increased. In 1845 in some places in the West, grain was not worth the freight charges, but this condition changed rapidly after 1848. Prices received by farmers climbed steadily from about

1848 on, and as a result, western competition in wheat became more damaging for eastern farmers.¹²

The combination of improved transportation, increased productivity per man, western population growth, and returning prosperity all spelled the alteration of general farming in the East. At the same time the constant increase in the size of metropolitan areas called for increased and improved transportation for dairy products. So it was that New England and New York became centers of dairy production and distribution. Attention to dairying was also evident in the areas around Philadelphia, Baltimore, Richmond, and Washington. Some dairying was usually practiced as a part of general farming, but commercial dairying depended on markets. The areas in which the industry flourished was limited by time and distance from the metropolis.¹³

In 1839 an agricultural department was established in the U.S. Patent Office which collected and disseminated agricultural information. In 1862 a federal Department of Agriculture was formed. In the late forties and early fifties, many states also established departments of agriculture.

Specialized Farm Press Is Born

More farm specialization in the East, the rise of agricultural societies, and the information services of government provided the basis for a specialized farm press. Before 1834 the agricultural journals collected and presented data without special regard for system. After that date the papers began to gather their information under particular headings.¹⁴ The next step in the process of specialization occurred when the various columns were supplemented by independent journals.

The development of the dairy journal was slow because farmers' experiments were almost the only sources of information. These experiments resulted in the printing of a great variety of ideas on agricultural techniques, which were complicated by sectional differences and rendered more confusing by the fact that they were not often tested. The journals consequently reflected the confusion by accepting articles of a contradictory nature. Accordingly, if an editor took a position it was generally one based as much on prejudice as on observation.

Editorial difficulties in securing factual information became less acute after 1850. In 1841 Liebig's work on soil chemistry began to be known in the United States, and records of it were subsequently copied in many journals, bit by bit,

technical jargon and all. This republication resulted in "a greatly intensified interest in the chemistry of agriculture and in experimentation, and a demand for formal agricultural education from a scientific viewpoint...."¹⁵

A natural result of the popular interest in formal education was the formation of the agricultural college. The first of these new institutions was founded in Michigan in 1857. However, the movement for agricultural colleges did not get well under way until after 1860. Nevertheless, when they became numerous they provided new sources of information for the agricultural press. If at times the editors were confused, they only reflected the confusion about them. The journalists were men with a mission, however, and confused or not, they had work to do. Without fear, and too often with a minimum of knowledge, they applied themselves to the task of reforming American agriculture.

The first of these prophets was David Wiley, who edited and published the Agricultural Museum at Georgetown, D.C., from July, 1810, to May, 1812.¹⁶ Besides being a paper of general farm interest, he intended his journal to be the organ of the Columbian Agricultural Society. He invited readers to submit articles on all agricultural subjects, and a few did. The magazine also lifted articles from other publications, chiefly British. Although some advice was offered on butter making as well as the improvement of breeds of cattle, discussion of dairying made up only a minor portion of its contents.¹⁷

While Wiley had the distinction of being first in the field, the most significant of the early agricultural journals was undoubtedly the American Farmer, started by John S. Skinner in Baltimore on April 2, 1819. During his life, Skinner owned and edited several agricultural papers and followed the journalistic custom of his time by borrowing liberally from other papers. Although dairying received some attention from Skinner, he was primarily interested in writing and borrowing articles on the care of cattle and the improvement of breeds. Articles by Timothy Pickering on cattle breeding appeared in the earliest issues. The editor condemned what he believed to be the general breeding practices followed by farmers. He seemed convinced that they sold the best and bred only from the worst of their stock.¹⁸ Skinner recommended the use of the single-purpose cow (one bred for milk or for beef production but not for both). However, he did not argue his point too vigorously. He favored the Alderney and insisted that no other breed was

as good for butter production.¹⁹ While his choice of Alderney was merely an editorial preference, it did indicate support of specialization in dairy breeding. However, the virtues of the Alderney remained unsubstantiated by investigation and the endorsement was ignored by the farmers. The pioneer editor also devoted considerable space to the feeding and care of cattle. The pattern set by Skinner in this regard has been followed in dairy journals throughout their history. Editors of the journals have been concerned with the changes taking place in these fields. While the American Farmer, as edited by Skinner, used no space in advocating winter feeding, it did insist on careful and full milking, combined with good, full feeding.²⁰ The editor condemned the common practice of allowing cattle to run at large, urging farmers instead to pen their cattle.²¹ Skinner condoned some practices of farmers in the presanitation era, even suggesting that butter could be made pure again by boiling and reworking.²² This may have been the first American recipe for processed butter. However, it should be said that under Skinner the American Farmer did crusade for dairy cleanliness. Among other things he insisted that a dairy or milk house would lead to this end.²³ Although knowledge of bacteria was still a thing of the future, even the earliest journals recognized the relationship between filth and a bad product, if not between filth and disease.

Skinner's campaign for cleanliness was supported in fact if not by specific reference by the New England Farmer, first published in Boston in 1823 and edited by Thomas G. Fessenden. Accordingly we find that in 1826 he reprinted an article from an English publication advising that milk vessels be well scalded before use.²⁴ But no matter how desirable this precaution, there was no evidence that the practice was widely followed. Strangely enough in spite of the fact that wooden vessels were difficult to clean, both the New England Farmer and the American Farmer agreed in recommending the use of wooden pails and implements for the handling of milk. The New England Farmer even suggested that cheese poisoning could be caused by letting milk stand in lead, brass, or copper vessels.²⁵ The discussion which followed was but a prelude to later arguments over materials used in churns and other dairy utensils.

Not only was there interest in implements, and especially churns, but much space was devoted to instructions for buttermaking. In fact, with breeding being excepted, this subject took up more space than any other. Since buttermaking

was primarily a feminine occupation, early articles were frequently written by women. So we are not surprised to find a "Dairy Woman," writing to the New England Farmer in 1826, suggesting that when butter was slow to come in the winter, the cream could be soured and the process hastened by adding pure vinegar.²⁶ Other papers offered similar advice. The process must have been widely adopted, for a subsequent generation of editors had to devote considerable space in an effort to end the practice. In 1833 the American Farmer was still interested in the problem of making rancid butter sweet. Its editor suggested that one-half gallon of sweet milk be added to three pounds of butter and the whole re churned. Thus the second recipe for reconstituted butter found its way into print.²⁷ This time it was under a different editor, however, for in 1829 John Skinner, founder of the American Farmer, was shifting his interests and had begun the American Turf Register. In 1830 he had sold the American Farmer, which continued publication under various editors and titles until the end of the nineteenth century.²⁸

In the 1820's, the aims of breeding for dairying took a turn different from that initiated by Skinner. It was then that Thomas Fessenden of the New England Farmer started proclaiming the superiority of the Shorthorn breed for this purpose. Records of milk production were offered as proof. More significantly, however, the Devons and other breeds were also advocated because of their virtues as general-purpose cows.²⁹ The general-purpose cow subsequently became a fetish with some of the editors. With but few protests this attitude persisted until late in the nineteenth century.

One of the few who protested calling the Shorthorns dairy cattle was Timothy Pickering. In 1826 he stirred the wrath of farmers to such an extent that quarrels over breeding took up most of the space in many issues of various periodicals. For example, no less than twenty-seven separate articles or letters were devoted to the subject in a single volume of the New England Farmer.³⁰ Because of the quite common editorial practice of lifting material from other publications, articles often reappeared a number of times. Eventually, out of all this welter of argument, the majority of opinion seemed to favor one or another of the all-purpose breeds in preference to the native stock. As the New England Farmer suggested in 1832: "The Holderness, short-horned, Denton and Ayrshire breeds are . . . all of them superior to our native breeds as milkers. There may occasionally be found

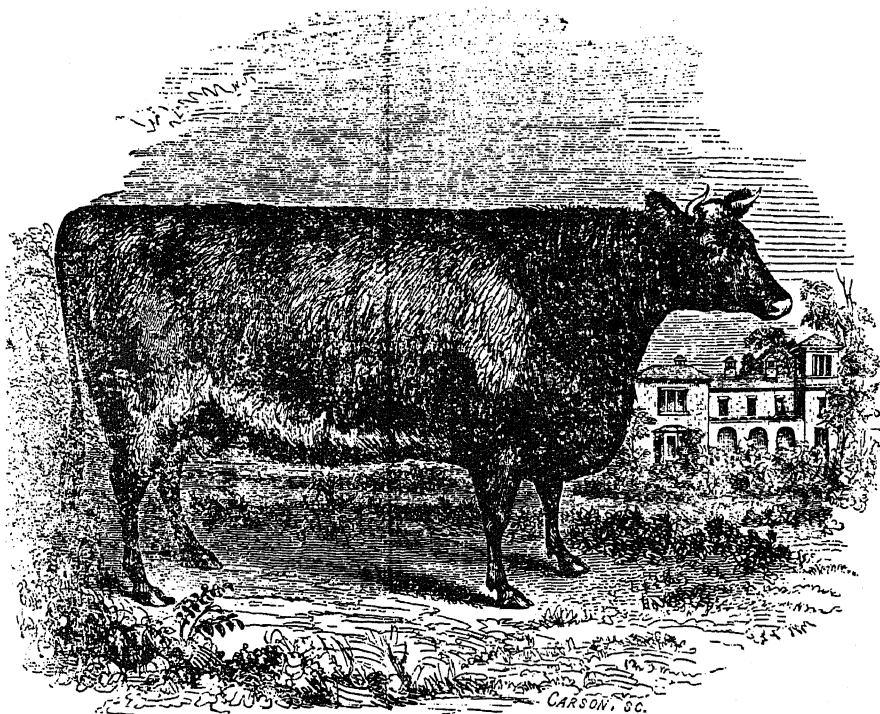
among the thousands of cows of our native breeds, here and there, one possessing remarkable properties as a milker. But every person who has given the breeds referred to, a fair trial, will, I doubt not, agree with me that they are in general better milkers than our native cows; and that they are by no means so destructive of the contents of our barns."³¹ In time the dispute over breeds gave way to a spirit of nationalism as farmers came to argue that America could certainly produce better cows than could Europe.

In the 1830's, however, rudimentary knowledge of breeding led to complicated and bootless wrangling. The editors of the Cultivator (first published at Albany in 1834) collected various opinions under the title "Cattle Husbandry." The development of this special column indicated a more definite and better organized approach on the part of the editors. It perhaps also revealed a more specialized interest among farmers. Thereafter, each issue of the Cultivator contained a department wherein the three editors, J. Buel, J. P. Beekman, and J. D. Wasson, expressed themselves in favor of the various breeds of general-purpose cattle.³² Arguments in support of different breeds became somewhat more moderate as new types of cattle were introduced. The first volume of the Cultivator mentioned an astonishingly long list of breeds:

The neat cattle of England have been classed under the heads of:

1. Long-horns, including the improved stock of Bakewell;
2. Middle-horns, including Devon and Hereford cattle;
3. Short-horns, comprising Teeswater, Holderness, Durham and improved short horns;
4. Hornless, or polled, or Galloway breed; and,
5. Crumpled horns, or Alderney, derived from France.³³

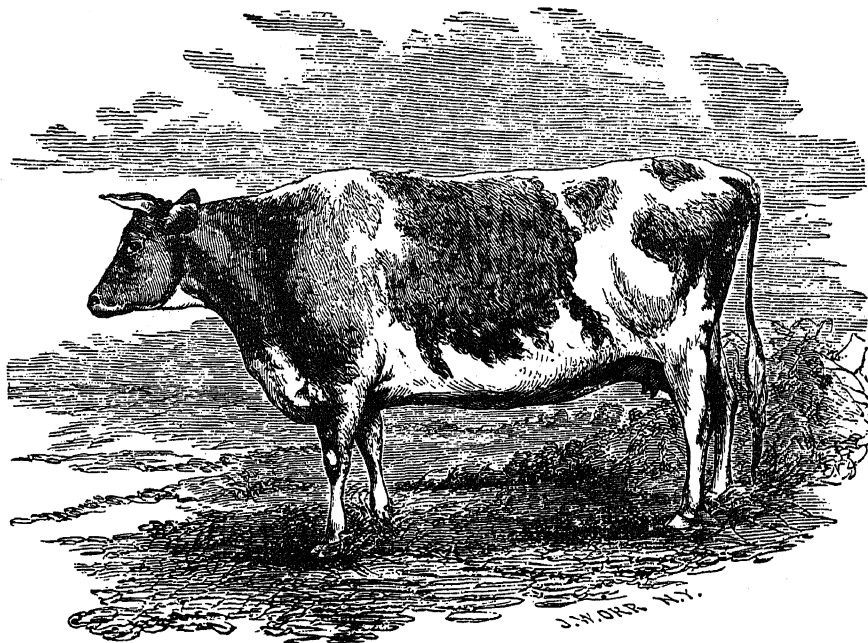
The qualities of the Devon were listed as their abilities at "working, fattening and milking." Here was a triple-purpose breed. The editors admitted, however, that some Devons were inferior as dairy cattle.³⁴ The possibility that some cattle were superior for dairying was further suggested by an account of York and Durham cattle which were "long celebrated, principally for their reputation as extraordinary milkers. This property they are supposed to have acquired by a cross with a fine milk breed from Holstein, at a remote period."³⁵ Shorthorns nearly became an obsession with Jesse Buel, who assumed single editorship of the Cultivator in 1835. By 1837, however, he began to switch to the Alderney because they also fattened well.³⁶ From 1810 to 1859 the



Improved Short-Horned Cow Jacintha, from a drawing by H. Strafford, Esq.

The Property of LEWIS G. MORRIS and NOEL J. BECAR, Esqs.

A dairy cow of the early nineteenth century. Editors of general farm papers championed this type of cow over the native breeds.



Jersey Cow, Charity.

Calved 1850—imported August, 1854 from the Island of Jersey, by J. A. Taintor, for J. Howard Mc Henry, Pikesville, Baltimore Co., Md.

Early type of Jersey. Editors sometimes thought these cattle inferior because they provided little meat when slaughtered.

general-purpose cow was preferred by the farmers. Since all information came from subscribers or correspondents, it was not surprising that the editors reflected popular ideas when farmer opinion was nearly unanimous.

By 1840, however, editorial acceptance of the general-purpose cow showed some signs of dwindling. The change of editors from Thomas Fessenden to Allen Putnam introduced a new attitude toward dairy cattle in the New England Farmer. Putnam praised the Alderney as a producer of rich milk, but most importantly: "They are small in size and generally inferior in shape and appearance, and seldom exhibit much thrift. They are not to be chosen for beef."³⁷ Similarly, in 1844, the Cultivator quoted the Journal of the Royal Society of England to the effect that German farmers imported Ayrshires because the breed was considered best for the dairy.³⁸ The concept of a single-purpose cow developed in Europe and by devious route was presented to the American farmer.

Single-Purpose Breeds Have Uphill Battle

In 1839 Luther Tucker became owner and editor of the Cultivator, replacing J. Buel, the general-purpose advocate.³⁹ As a result of this change, the journal shifted its support to the single-purpose dairy cow. The shift in emphasis was neither sudden nor complete, however, and in any case the farmers were not much impressed. As late as 1844 one William Sotham, from near Albany, vigorously—even violently—defended the Hereford as a dairy cow.⁴⁰

The farmers did, however, retain an interest in breed improvement, even if not too much impressed by the specialized breeds. So we are not surprised to find something of stubborn pride in the farmer who wrote to the Genesee Farmer: "Through the medium of your paper we find many of the farmers throughout the country boasting of the fine qualities of their stock—their "Short Horned Durhams," their "Devonshires," or some other "blood"—as far superior to any others for workers or milkers. All I have to say through the same medium, is that I have a Native Scrub Cow which I wish to class with their number one "bloods," as a milker. Let those that have any better speak out. From my cow, in just ten months, commencing March 10th, 1850, was made 397 3/4 lbs. of good well-worked butter" ⁴¹ A puzzled Scot, just migrated to the country, wrote to inquire if Shorthorns were really better milk producers in America. In his old home, Ayrshires were considered dairy cattle; Shorthorns,

beef cattle.⁴² Scotland had apparently made the distinction between dairy and beef breeds, but this development was just under way in the United States. Nevertheless, in the forties Ayrshires received some slight commendation from the Prairie Farmer, first published in 1840.⁴³ A description of the Ayrshires and the record of one of its representatives were also published in the Monthly Journal of Agriculture by that quiet proponent of the dairy cow, John S. Skinner. By 1845, after several publishing ventures, Skinner had established the Monthly Journal of Agriculture at New York. He published articles on various breeds and even suggested if possible the formation of native breeds. In all cases, however, he focused attention on specialized dairy cows.⁴⁴ His advocacy of distinct dairy breeds, however, did not by any means imply that dairying itself was to be a specialty. In one of the few bits of verse found in these early agricultural journals, the function of the cow in general farming was made abundantly clear:

Cultivate little, but cultivate well,
Your crops alternate, if good produce you'd sell;
Your soil manure often—the return it yields
Will tenfold repay what you spend on your fields.
Sow grass, too, at times, if you wish to make sure
Of having a plentiful stock of manure.
Without grass you've no cattle—without cattle 'tis plain,
You'll have no manure and without that no grain.⁴⁵

This expressed the most progressive attitude toward farming. Skinner failed to credit the author of the rhyme.

Not every editor of the 1840's shared the popular interest in breeding. In fact, by their early emphasis on dairy products to the neglect of breeding, the editors of the American Agriculturist seemed at first to have declared war on the current trend. Founded by A. B. and R. L. Allen in 1843, the American Agriculturist in its first years of life centered its attention on butter and cheese making. At the same time space was devoted to feeding, productivity of cattle, and other matters.⁴⁶ Nevertheless, Anthony Allen had travelled to England where he was impressed with the superiority of the livestock. He imported some cattle and became an apostle of foreign improved breeds. This partisanship became evident in later volumes of his paper.⁴⁷

By 1850 all editors advocated the use of purebreds, and many journalists urged the superiority of single-purpose cattle. Farmers, in contrast, tended to favor the less expensive "native" all-purpose cow.

Although advice on veterinary matters appeared from time to time in all journals, the American Agriculturist of 1848 devoted an exceptionally large proportion of its space to disease problems. The development of a special veterinary department was still to come, but a total of eleven articles on diseases in one volume was quite exceptional.⁴⁸ Cures, in most cases, required bleeding and purges, the latter usually of epsom salts. Treatments recommended sometimes verged on the barbaric, but this was common in the practice of human medicine.⁴⁹ The attention given to the subject at least indicated a conscientious interest in veterinary medicine. Apparently the articles were inspired by farmers who wanted information on cattle diseases.

From 1819 on, both farmers and editors agreed that breeding alone would not insure high dairy production. It was then being recognized that feeding was also important. In 1838 the Cultivator advocated shelter for cattle combined with good feeding during the winter.⁵⁰ This program for winter shelter and feeding, although it came late, indicated that farmers no longer let cattle run at large or forage for food in the winter. But the inspiration for adequate winter shelter and full feeding originated with farmers rather than editors. The appeal was phrased in terms of kindness to animals without mention of profit. The editorial program for humane treatment of cattle was begun, and by 1852 definite advances were apparent. For the editors, at least, winter feeding was an accepted necessity, as was a "nice warm yard." No mention was made of a barn; that was yet to come. The injunctions concerning the comfort of cattle went further than feeding. "Everyone knows the great necessity there is of being gentle and kind to cows, so that they may be quiet and peaceful, and not stand trembling in duration vile while being milked. It is this that accounts for the opinion that a cow will give a dairy-maid more milk than she will to a man."⁵¹ Although concern for the discontented cow was not new, it was in this decade (1850-60) that the idea of kindness to cattle gained its greatest momentum. The movement was to be another of the more pervasive crusades of the nineteenth-century dairy journalist. Sometimes the appeal was to humaneness, sometimes to the profit motive, but it always formed a definite part of the editorial program. It even appeared in the Prairie Farmer, of Chicago, a journal of the rough and ready West. In a list of "Rules for Milking" the editors admonished their readers: "Never scold or strike a cow for running about the yard or kicking. If she runs about, have patience, talk kindly to her, and tie

her up as a last resort.”⁵² The increasing insistence of injunctions of this sort indicated the view of the editors; the fact that the campaign was continued over many decades showed the attitude of the farmers. The editors had not been able to interest them in the subject.

Dairy Products Manufacture a Home Industry

Throughout the period 1810–50, the manufacture of butter and cheese continued as a home industry. Farmers questioned editors on the process of cheese making, and indeed, the technique was rather complex. It was not made more clear by the various conflicting theories and differing directions often given in the same paper in the same year with no stated editorial preference.⁵³ Cheese poisoning (human sickness traced to cheese) was still common in 1832, although the editor of the New England Farmer no longer thought metal implements the cause. Instead, Indian tobacco when eaten by cows was stated to be the most probable cause of the trouble.⁵⁴ The farmers held this view, and the editors had no other sources of information.

The New England Farmer suggested that annatto or carrot juice be added as coloring for cheese and saltpeter used as a preservative.⁵⁵ The farmers, however, did not accept this editorial dictum without question. A member of the Massachusetts Society for the Promotion of Agriculture thought that the addition of niter might be dangerous. The same correspondent offered advice on how to make butter properly.⁵⁶ Although a variety of production methods were suggested by correspondents, no startling improvements were advanced. Nevertheless, toward the end of the period the use of definite quantities of salt and rennet was suggested by the editors. At the same time, lead and zinc vessels were sometimes advocated because they tended to keep milk cool and sweet.⁵⁷ Still, there was little that could be added to the existing lore on the manufacture of dairy products. Consequently, the editors focused greater attention on transportation and marketing—subjects of new significance during the depression of the early forties.

In the 1830's and 1840's, Americans became more interested in foreign trade, especially with the Orient. In spite of an ancient prejudice of the Chinese against cheese, Luther Tucker observed that “the export of cheese to China from this country is increasing, and will soon form a considerable item. It is packed whole in cases filled with sawdust, and secured so as to exclude the air.”⁵⁸ The trade with

China did not live up to the hopes of the editor, but that with Great Britain did.⁵⁹ At the same time, the domestic market for cheese did not go unnoticed.

The Erie canal provided the chief transportation route for New York producers of this commodity. The canal collector's books contained a mass of statistics which were presented to the farmers as evidence of the profit in cheese making.⁶⁰ In the West, the farmers began the factory production of cheese for this profitable market in the 1840's. Trumbull County, Ohio, led in the venture. The factory system was promoted by the Ohio Cultivator as early as 1850.⁶¹ The Ohio Cultivator, begun at Columbus, Ohio, in 1845 and edited by M. B. Bateham, emphasized the profits available in New York and foreign markets. As a consequence, Bateham offered many suggestions both in the production and transportation of dairy products.⁶²

Although dairying was generally considered as one phase of general farming, the rejuvenating effects of dairy specialization were sometimes noted by the editors. No complicated knowledge of western competition in grain, nor even any full realization of the growth and importance of American cities, was necessary to understand how one New England farmer succeeded by concentrating on dairying. He was "satisfied that close vicinity to a large market, and the payments which a naturally willing soil could be encouraged to make on behalf of generous cultivation... warranted him in the undertaking." At the end of twenty-five years, he could survey his labors, and the results produced by them, with much pride and pleasure.⁶³ Editors did not yet advocate dairying as an exclusive enterprise, but the idea had obviously taken shape by 1849. By that year, Daniel Webster had apparently ventured into full-scale dairying and incidentally expressed a preference for Alderney cattle, although he also spoke highly of the Ayrshire.⁶⁴ In Vermont, the editor of the Cultivator noted that on some farms dairying was supplanting wool growing. These articles, however, merely reported news; commercial, large-scale dairying as yet received no editorial encouragement.⁶⁵

In addition to offering technical and market advice, the editors occasionally drew attention to their services to agriculture. In 1849 the editor of the Cultivator remarked: "The improvements in farming we now observe, may be principally ascribed to a wide diffusion of the desired information, through the medium of Agricultural Journals."⁶⁶ This was the boast, but the circulation of periodicals was not great at

any time, and there was a constant refusal of farmers to put much stock in book farming.⁶⁷ Still, the journals used the best sources of information and advocated new practices. Some even borrowed articles from the reports of the Commissioner of Patents, which always contained comments on various farm implements. Knowledge of technical improvements and changes probably progressed from the editors to the more literate farmers and thence to neighbors.

See Need for More Education

The journalists were always aware of their role as educators and were also certain that education was a good thing. Thus the editors of the Genesee Farmer (founded in 1831 by Luther Tucker) bitterly attacked the politicians of the state of New York for niggardliness in supporting education and experimentation. Lee and Vick, the editors in 1852, stated their intention of undertaking an intellectual strike—certainly one of the more unusual proposals even for an era of militant journalism. The declaration was particularly unusual in its assumption that the state was responsible for agricultural experimentation: "Accurate scientific experiments in rural economy cannot be made without costing considerable money; and so long as a State in which eleven or twelve hundred thousands cows are milked, and which produces fifty million pounds of cheese and eighty-five million pounds of butter a year, is too poor . . . to pay for any experiments designed to increase the yield of milk from any given amount of food, we feel no obligation to give either our time or money for its benefit in that behalf."⁶⁸ Between 1830 and 1860 the editors achieved independence from their correspondents. The journalists no longer relied exclusively upon farmers for technical information. On the other hand, the editors were restricted to the matter in scientific reports and were in a sense as much hampered in a search for information as before. Newer sources of information afforded opportunities for the editors to oppose some of the accepted but inaccurate lore of the period. Before 1850 the editors had seldom lacked courage to contradict farmer opinion but often lacked information. After 1850 editors were increasingly able to dispute with their correspondents and cite either authorities or experiments in support of their editorial position. At the same time, the editors themselves may sometimes have placed too great reliance upon the pronouncements from the laboratories. They may even have been given too often to passing along information as it came from

the laboratory, frequently without comment, and possibly without checking it in practice.

In place of simple on-the-farm experiments and learned speculation upon their meaning and value, the editors now faced a more impressive array of facts and could scarcely do more than report them. A typical example was the chemical analysis of milk presented in the Ohio Cultivator in 1850.⁶⁹ Probably the farmers read these statements with no less interest or understanding than later farmers read reports which editors have attempted to simplify. Nor were the editors able to accept without question the results of all research being carried on. Some disappointments in rating some research seem to have had the effect in the 1850's of making some editors more cautious. Thus M. B. Bateham approached the question of milk sickness with great care: "The subject of milk sickness has in years past excited much discussion in the papers, but we believe the cause of the disease has never yet been ascertained to the satisfaction of many well-informed persons. From the facts that have come to our knowledge, we have always been of the opinion that the cause was to be found in some poisonous plant; and many writers have believed... that the poison ivy... is that plant; but we have somewhere read strong testimony against this theory."⁷⁰ If the editors were unaware, awaiting the advent of Louis Pasteur and the microbe origin of disease, they were also in need of the genetic theories of Gregor Mendel. The Allens of the American Agriculturist, for example, printed no articles on the subject of either cheese or butter in the year 1851. Instead, they offered trenchant comments on breeding, with some well barbed attacks on the defenders of the native cow:

We can show in many of the short horn herds, that are looked down upon with so much self-complacency by these anti-improvers, numerous instances of larger yielders, whether of milk or butter, and what is of a great deal more consequence, we can show their relations, whether in the ascending or descending line, as uniformly possessing this quality. Here is the great overshadowing superiority of the improved breed—transmissible qualities, reliable and unmistakable; and we claim too, for this breed, that when they have ceased to yield an abundant flow of milk, they will take on flesh as rapidly as any other breeds, and much more so than falsely styled natives.⁷¹

The attack on scrubs was forceful enough, but the general-purpose cow was still in vogue. On the other hand, the Allens may have thought that one crusade at a time was enough. Nevertheless, they advanced sound genetic theory when they claimed that only purebreds could consistently transmit milking qualities. But this statement was not accepted without protest. Luther Tucker of the Cultivator challenged the Allens of the American Agriculturist to present evidence of the superiority of purebred stock.⁷² Tucker was not an outspoken supporter of foreign breeds, but previously he had not shown opposition to imported cattle. It is not unlikely that some of his readers may have thought the dispute was a circulation stunt, or a rising dependence upon research findings may have called forth a demand for proof. In any case, the Allens responded in a single issue with two pages, or eight columns of testimony from books, articles, and written records. The defense was masterful, but the crusade continued, apparently because the farmers, for one reason or another, were not impressed.

If the farmers were not greatly interested in breeding from known strains, Tucker apparently was. In 1853 he began publication of a weekly version of the Cultivator which he called the Country Gentleman.⁷³ In this magazine he instituted two columns, "The Dairy," and "The Grazier," and under these headings included all information on the various phases of dairying. "The Dairy" encompassed information on processing milk products. Under "The Grazier," Tucker analyzed the problems of breeding.⁷⁴ Most of the dairying articles, however, were concerned with feeding and handling, common sense, kindness, and cleanliness. But no matter what the subject matter, the information was now collected into separate columns. And the next step was the development of an independent dairy press.

Separate Dairy Press Develops

By 1859 many of the future programs of dairy journals had been fairly well established. To the early journalist, economic problems had been resolved into questions of more efficient production. All effort, therefore, was directed toward ways of making production more effective. Attempts were made to increase the use of special breeds, to promote cleanliness, to feed properly and well, to shelter cattle and in general to treat them kindly, to produce products by uniform methods and with high and consistent standards, and to apply the factory system when it was practicable. Some

questions, such as the use of the specialized dairy cow, were still in flux, and startling scientific progress was still to come. Nevertheless, the way was prepared for the development of a distinct dairy press. By 1859, technological and transportational advances made it nearly imperative that farmers specialize if at all possible. This, in turn, made a distinct dairy press practicable.

The influence of the pioneer agricultural journalists can be partly assessed by the advent of the dairy press. Only a prosperous and large industry could support a specialized branch of journalism. The increase of population and the rise of highly populated urban centers contributed greatly to the development of dairying. The change to commercial dairying would have been much slower without the prodding of the journalists. Their influence on farmers was destined to increase as America grew.

Chapter 2 - The First Efforts in Dairy Journalism 1852-1862

First Dairy Journals Were Farm Papers Which Emphasized Dairying

Only two dairy periodicals appeared between 1852 and 1862. The Western Reserve Farmer and Dairyman was born and died at Jefferson, Ohio, in 1852. The Dairyman's Record began at Little Falls, New York, in 1859, appeared as the Dairy Farmer in 1860, and ceased publication in 1862.¹

At a time when most dairy manufacturing was done on the farm, the founding of dairy journals depended primarily on area concentration on dairy farming. And before 1862 commercial dairy farming was neither common nor extensive. Consequently the first dairy journals appeared as general agricultural periodicals which emphasized dairying. The development of these journals which successively gave major and then full attention to dairy farming depended on farmers shifting to commercial dairying. The change to intensive dairying, however, was only possible in those places which were near urban markets or could be reached by railroad or canal. Although dairying was restricted by natural conditions, such as soil and climate, these factors seldom determined the location of the industry. Markets were essential before the industry could begin; and in an era of slow transportation, no refrigeration, and faulty notions of disease transmission, distance from the market limited production areas.

Distance from markets also tended to determine what particular dairy products were to be produced for trade. In rather remote regions some butter was made for local use, and a little highly salted butter entered more distant trade, but the chief product of these dairy regions was

cheese. On the other hand, in areas such as Orange County, New York, where the market was near and transportation relatively swift, farmers could profitably specialize in butter making. Out along the Erie canal, however, farmers concentrated on cheese making. Cheese was not exactly indestructible, but it did not deteriorate as quickly as butter. Whole milk and cream were supplied to cities from nearby farms or from cow sheds situated in the heart of the city.² Even regions especially blessed by nature could not send raw milk any distance in an age when pasteurization and refrigeration were unknown.

Little Dairy Progress for Half Century

Not only was pasteurization unknown, but more practically, the need for cleanliness was largely ignored in handling milk and in making butter and cheese. The harnessing of animal power to the churn and some experiments in the use of chemicals as preservatives were about the only technical advances in dairy manufacturing during the half century after 1810.³ Lack of technical progress did not, of course, preclude the development of the factory system of cheese making. Sometime in the 1840's cheese factories were begun in the Ohio Western Reserve.

The development of large-scale cheese production probably encouraged G. B. Miller to found the semimonthly Western Reserve Farmer and Dairyman at Jefferson, Ohio, in March, 1852. The journal was edited by N. E. French, assisted by R. M. Walker.⁴ From the contents of the journal it would seem that the title for the journal might have been chosen mainly to gain subscribers. Primarily the journal restated ideas on general farm practice. French composed his agricultural journal largely of articles copied from other general farm papers. And he borrowed very freely from every other available source. Articles ranged from "Remarks on the Action of Lime on Clay," from the Working Farmer, to "A Plea for Agriculture," from a Patent Office Report. As French explained: "... the practical farmer, should be well informed in regard to every principle in Agriculture that may help to shed more light upon his business, or qualify him for better appreciation of his duties as a man and a citizen."⁵ These were lofty ideals, but they were not directly related to dairying. Before the end of 1852 Miller sold the Western Reserve Farmer and Dairyman to Thomas Brown, publisher of the Cleveland Ohio Farmer.⁶ This ended the venture. The Western Reserve Farmer and

Dairyman apparently did not have available to it enough dairy material to survive. The last issue of the Farmer and Dairyman appeared October 15, 1852.

The Western Reserve Farmer and Dairyman of Miller and French had been highly speculative. In contrast, little uncertainty oppressed A. W. Eaton when he began his semi-monthly Dairyman's Record at Little Falls, New York, in 1859.⁷ Factory production of cheese had ceased in the Western Reserve before 1860, but in 1851 cheese factories first appeared in the Mohawk Valley, an area which for sometime had been devoted to dairying.⁸ The valley had concentrated on butter production, and the rapid increase of cheese factories induced more widespread farmer interest in dairying. Although little new dairy information could be presented by the press, there were potential subscribers for a dairy journal. As Eaton observed at the end of 1859: "The leading idea sought to be realized in the Publication of the Dairyman's Record was, to embody in convenient form for preservation the Essays and Discussions of the Farmers' Club of Little Falls, and of the Winfield Philosophical Club—both being organizations in the County of Herkimer, of Farmers who are nearly all engaged in Dairy Farming."⁹

Country Papers Sponsor Dairy Journals

Eaton claimed he received no compensation, but the clubs insured him against loss with a guaranteed subscription list of 100 copies at fifty cents each. These subscriptions with a few advertisements, promised to support the venture. Since the paper was printed in conjunction with the Mohawk Courier, one journal might if need be support the other financially during the first few years.¹⁰ Thus, the first true dairy paper began as an extension of a county newspaper, rather than as the offspring of its intellectual parents, the agricultural journal. The Dairyman's Record was the special organ of farmers, operated by and for them. Editorial responsibility for the journal was neither well established nor publicized. In fact, there was no single editor and no editorial policy save that of providing a medium for the exchange of ideas. There were no campaigns, crusades, or warnings of disaster if some editorial suggestion or other were not followed by the farmers. Subjects were handled as they came to the minds of contributors, and most importantly, the journal seemed to have no consistent policy on any dairy question. Contributors were often forceful in their pronouncements, but no editor judged in favor of one side or the other in any controversy.

In order to obtain a steady supply of material, Eaton secured the promises of L. B. Arnold, X. A. Willard, A. Reed, and C. Oyston to act as "editors" during the year 1859. However, none of these was officially listed as such. Eaton and Arnold apparently undertook to publish the journal and fill its columns, but that seemed to limit their activities.¹¹ Eaton asserted that the paper was founded in order to save labor and increase the profits of the subscribers. Both objectives apparently were to be achieved merely by publishing the journal. Essays read at the meetings of the two sponsoring clubs provided most of the original articles in the journal. Arnold or Willard wrote articles, and now and then pieces by others appeared, but later on much of the material was taken from other farm journals. However, it should be said that the scissors and paste pot were seldom used in the early issues of the paper.

In spite of its local circulation, the Dairyman's Record was remarkably free of claims of local self-importance. A notable exception was the first article in the first issue which explained the wonders of Herkimer County and concluded that "nowhere within the broad limits of the nation, and I do not know but I may say in the civilized world, is there an equal amount produced upon an equal area, yet this is far from being the extent of her capacity."¹² Similar examples of localism did not appear in later issues. This would seem to indicate that the publisher hoped the journal would gain circulation outside of Herkimer County.

The journal covered a wide variety of subjects. Eaton even characterized his venture as an agricultural paper which happened to be published in a region largely devoted to dairying. The nature of the advertisements in this first dairy journal suggested the general character of the magazine. The last page of each eight-page number carried advertisements for Bryson's Mohawk mower and reaper, the American Stock Journal, a commercial college in Albany, and a miller who was prepared to grind all kinds of feed.¹³ Most of the advertising was for local firms, and the type of copy was similar to that found in any agricultural periodical or country weekly. In part, this situation arose from the fact that there were few specialized dairy implements on the market in 1859. Nevertheless, the absence of churn or stock advertisements seemed to show that manufacturers and dealers considered the journal to be a general farm paper. Aside from dairying, horticulture particularly seemed to attract the attention of the editors. In addition, articles such as "Old Homes, Old Woods, Old Books, Old

Letters" (taken from the California Farmer), while out of the ordinary, were in no sense unexpected. Subject matter ranged more or less haphazardly, from the art of making maple sugar to defects in the Atlantic telegraph cable.¹⁴ These were sidelines, however, for the ever pressing problem appeared to be the venerable question of breeding improved types of cattle.

The fifty-first meeting of the Farmers' Club (as reported in the Dairyman's Record) began with a paper on the various breeds. Almost immediately the discussion drifted to the question of whether farmers should raise their own cows. Forty years before John Skinner had set down the law on this subject, but as late as 1859 the only agreement reached was that "there seemed to be a variety of opinions in reference to the profit of dairymen raising their own cows."¹⁵ The farmers did agree, however, that on large farms it might be well to raise dairy cows. One R. D. Brown ventured to express the opinion that it was profitable for dairymen to raise cattle for herd replacements and possibly for sale. He based his opinions on experiments conducted on a farm of 200 acres, which apparently passed for a large holding at that time. Brown favored Durhams over Dutch cattle (which probably were Holsteins).¹⁶ In the same issue, one of the editors supported Brown with an article clipped from the American Agriculturist which asserted that breeding on the farm was needed to develop milking qualities in cattle.¹⁷

The controversy continued for some time between small farmers who bought from drovers and large farmers who raised dairy cattle. The dispute was significant because breeding by farmers was necessary before special-purpose cattle could be widely accepted. Although the editors presented all sides of the controversy, they threw their weight toward home breeding. As an unsigned editorial asserted: "There is no sense in the practice now so prevalent of importing cows from Canada and other distant localities. With a few exceptions drovers pick up such cows only as the owners do not desire to keep.... It is the purpose of the drover to make money in his trade, to buy cheap and sell dear, rather than to improve the stock of the country."¹⁸ In the same issue, Alonzo Reed, one of the editor-contributors, wrote on the virtues of the Ayrshires.¹⁹

Problems of feeding, a favorite topic of the general farm editors, were discussed frequently in the Dairyman's Record. Although there was no consistent editorial policy, the editor-contributors approached the questions of feeding in much

the same manner as did the general agricultural papers. First the farmers were to be convinced that winter feeding was necessary, and then they were to be told what to feed. The idea of presenting seasonal information in season had not been fully developed. Thus an essay read before the Winfield Philosophical Club on June 24, 1859, by Irving Holcomb centered on winter and spring feeding. The speaker insisted that "it is undoubtedly owing to the mistaken policy of neglect during the cold and storms of winter, that we can charge the poor yield many dairymen receive."²⁰ Holcomb advocated full winter feeding and also stressed the importance of a "yard well protected from the wind" and the need for a convenient watering place.²¹ The author then outlined a program of spring feeding which included roots "and especially carrots" plus green corn fodder.²² Lest he be charged by farmers with advocating extravagant feeding practices, he ended his article with the observation:

Fine farming, be it never so nice, is not the thing unless it pays; and here, where we give an active laboring man wages enough for one summer's work, to buy a hundred acres of land in the west, we cannot afford to adopt the thousand and one new theories continually urged upon us. I believe in good farming, fine cows, fat horses and well-tilled lands. But we must remember that we are neither dukes nor lords who keep high-blooded animals, regardless of expense, to fill out the view from the windows of our country seat; but, on the contrary, we are farmers who earn our bread by the sweat of our brow, and who provide the support and education of our children by honest labor.²³

These recommendations for better feeding served to make him appear hardheaded and practical. In this way farmers were advised and doubters were appeased. While articles on better feeding tended later to disappear, the problem of finding more economical fodder continued to take space in the journal.

Editors took a step in the direction of greater productivity by insisting that manure be saved. One of the editors inquired, "Where is the dairyman that does not need a little jogging on this subject?"²⁴ Apparently none was found in the Mohawk Valley, for no protest was registered on the several articles which appeared in 1859. One contributor asserted that failure to shelter manure was criminal and merely increased the profits of fertilizer manufacturers. Other con-

tributors trenchantly pointed out that dairying could deplete the soil as quickly as any other branch of agriculture if manure was not saved and used.²⁵ These lectures apparently had some affect on the farmers, since discussions on saving manure were less frequent in the following years.

The various editors sometimes offered advice on marketing problems, but in an age when few, if any, statistics were available, marketing advice was necessarily general. In the twentieth century farmers were advised by the editors to change the fancies of the consumer by high-powered advertising campaigns to stimulate consumption of various dairy products. In 1859, however, the editors urged farmers to discover what the consumer wanted and then produce that type and quality of product.²⁶ But even if the wants of the consumer were known, how could the farmer meet them? Since there was no great body of information on the subject of manufacturing dairy products, the editors appealed for articles. They were particularly interested in scientific knowledge, since "the various operations are performed only mechanically without any very clear comprehension of the reason why they are so performed."²⁷ Farmers did not respond to the appeal for scientific observations. They simply were not equipped to carry on experiments on the basic questions of why certain techniques worked in cheese or butter making. Shortage of this sort of specific information was one of the greater threats to the life of the Dairyman's Record. In time the handful of contributors exhausted their supply of information.

Subsequent dairy periodicals had the advantage of the experiments conducted by the Department of Agriculture and the various agricultural colleges, but none of these institutions operated as effective investigators until after the Civil War. The Dairyman's Record could not offer scientific advice on the manufacturing of dairy products, and apparently farmer contributions were limited in number.

Because there was no strong editorial leadership, the Dairyman's Record represented farmer ideas on investigation and education. Larger, stronger, and more firmly edited farm journals demanded public support for scientific work, but the first dairy journal took no such stand.²⁸ The editors even reprinted an article from the Working Farmer in which the value of agricultural colleges was deprecated. Instead of colleges, the editors supported the currently popular lyceum.²⁹ Thus although education was not exactly ignored, the demand for formal experiments was.

The first volume of the Dairyman's Record closed in February, 1860. The sponsoring organizations were well pleased with the results of their first publishing effort. The subscribers had exchanged opinions on the advantages of either buying or raising cattle, had read reports on the virtues of several breeds of cattle, and had exchanged ideas on what and how much to feed. They had also read what other papers had to say on pruning vines, preparing fruit for market, the Austro-Italian war, and similar subjects, dairy, agricultural, and general.³⁰

The income from the magazine was not very large. In announcing continuation of the paper, Eaton advised his subscribers that he had made no profit in 1859 and that in the future the journal would appear monthly.³¹ In this manner he sought to decrease costs of publication. In February, 1860, the journal appeared as the Dairy Farmer. Eaton also raised the subscription price to sixty cents a year and severed the Dairy Farmer from the Mohawk Courier.³² This liberation was probably a mere formality, but an important one because the Mohawk Courier was a political paper.³³ In the troubled period just before the Civil War, the publisher probably did not want to discourage increased circulation by assuming any political obstacles.

As before, the "Proceedings and Essays of the Farmers' Club of Little Falls and of the Winfield Club" contributed much material to the journal.³⁴ Unlike the first venture, there was no mention of a guaranteed subscription list, although there may have been one. Eaton seemed determined to publish an independent and financially successful journal. He again proposed to perform some of the duties of editor, but as before called upon a corps of writers to set the editorial policy of the paper.³⁵ Eaton established the broad principle of making "the Dairy Farmer a true exponent of correct principles and practice in the important branch of agriculture to which its pages will be mainly devoted. . . ." ³⁶ But the details of this policy were left to the writers who were to "take the principal share of editorial labor in the. . . volume. . . ." ³⁷ Articles by farmers and gardeners were also acceptable. The sum of these contributions, plus whatever could be lifted from other publications, formed the content of the journal.

The Dairy Farmer covered a broader range of dairy subjects than had the Dairyman's Record, but factual information continued to be limited. The earlier publication, for example, had carried an article in which it was shown that

salt was harmful to all animal organisms.³⁸ This idea was not widely accepted, but when L. B. Arnold came to write a couple of articles on the use of salt he had little more information than the first writer. Arnold could only urge that cattle have access to salt as they pleased, rather than mixed in the food. He assumed that until science determined how much salt animals needed, the judgment of the cow had to be trusted.³⁹ Although the problem possibly lacked eternal significance, it was the first article in the new periodical and took up several pages. In subsequent issues salt was discussed as a butter preservative and soil fertilizer.⁴⁰ In keeping with the humane tendencies of the period, contributors to the Dairy Farmer advised farmers to be kind to cattle. "No dairyman should practice or allow any unkind treatment towards his stock, for it is against his purse, to say nothing of the inhumanity of the thing. The stool, toe of the boot, club or whip arguments, should not be suffered, and will not be successful in a well ordered dairy."⁴¹ There was, however, no real campaign for kindness to animals. The editors apparently felt that ignorance and unintentional cruelty were more wasteful than outright brutality. Therefore, the editors tried to encourage efficient animal husbandry. Clean water, near at hand, was suggested for cattle.⁴² Articles on feeding roots, raising rather than buying cows, changing pastures, and providing calcium-rich food also appeared in various issues.⁴³

Although clipped articles indicated the interests of the editors or publisher, the subjects discussed by the Philosophical and Farmers' Clubs indicated what concerned the farmers. In 1859 the Dairyman's Record had noted a meeting where "curing the tendency to abortion" was discussed.⁴⁴ A year later the Dairy Farmer devoted more space to abortion remedies. At the time abortion was not considered particularly contagious, although evidence to the contrary soon became overwhelming. In 1860 some farmers considered the disease to be the result of bad ventilation, of allowing manure to accumulate, or of not feeding enough bone-forming material.⁴⁵ No effective cures were suggested, and the problem of abortion continued to plague the farmer on into the twentieth century. In 1860, the editors could only pass on the currently accepted theories. Pasteur was still a few years away from his discovery of the microbe origin of disease and Bangs even further from his discovery of the bacteria which caused abortion.

In 1860 cattle distemper appeared in Massachusetts. The

CONTENTS.

	PAGE.
Address of Hon. L. Chandler Ball,	194
Abortion among Cows,	337
Agriculture in Common Schools,	96
Agricultural Education,	235
Agricultural Papers,	143
Agricultural Lectures at Yale College, ..	213
Agriculture, First Principles of,	345
A Productive Orchard,	20
A New Era,	18
An Arab Mare,	133
A Mother's Love,	44
Apple, The Yankee,	283
Apple Jelly,	219
Apiary in December,	222
Baked Apples,	166
Bees,	243
Bees, Lectures on, by Mr. Quinby,	28
Berkshire Hogs, Origin of,	82
Bird Law,	85
Bed Bugs, How to Destroy,	333
Butter,	23
Butter, How to Preserve,	20
Butter Fair,	254
Butter Making,	163
Butter Curing,	189
Butter for Market,	221
Butter Making,	221
Butter, The Quality of,	221
Black Warts on Plum Trees,	59
Buildings, the Color of,	306
Business,	127
Blight on Grapes—was it Thunder Blight.	109
Bones as a Fertilizer,	109
Bones, How to dissolve,	109
Change of Publishers,	41
Cheese, Discussion on Manufacture of, ..	73, 41
Cheese, Essay by R. Bucklin,	75, 73
Cheese, Essay on Curing,	265
Cheese made in Newport and Schuyler, ..	80
Cheese Making on the Sabbath,	184
Cheese Making,	292
Cheese, Curing on Shelf,	296
Cheese, Shipments of 1860,	272
Cheese Making, Rules for,	272
Cheese, on the Manufacture of,	122
Cheese, Western Reserve,	123
Cheese, New Method of Curing,	275
Calves,	233
Cashmere Goats in Kentucky,	160
California Fruits,	224
Cattle Disease—Pleuro-Pneumonia,	86, 90
Cattle Distemper in Massachusetts,	26
Cattle, Choice of Breed,	172
Cattle, Housing of,	135
Cattle Disease in Ireland,	140
Cattle Disease in Massachusetts,	54

	PAGE.
Cattle Disease in North Brookfield,	28
Carrots, Medical Qualities of,	237
Carrots for Horses,	271
Corn Crops in Ohio,	214
Coal Cinders, Sifting of,	334
Cream and Milk, yield of,	18
Cider Filters,	233
Cider, Modes of Preserving,	180
Corn and Cob Meal for Swine,	233
Churning Milk or Cream,	251
Choked Cattle,	276
Colts, Management of,	190
Cheap Railroads,	187
Crows, A Plea for,	170
Corrections,	144
Cow, a Good,	140
Cows Treatment of, at Calving,	155
Cows, Spaying of,	41
Cows, Health of,	82
Cows and Pumpkins,	236
Cow, a Good and Poor,	236
Chemical Influence of the Steam Engine on Agriculture,	159
Cows, Treatment of, before Parturition, .	299
California Scientific Lady Farmer,	303
Cud, Loss of,	282
Clover as Manure,	274
Clover Seed Sown in Autumn,	95
Clover, Experiments with Red,	17
Corn for Winter Fodder,	171
Daisies Effect Cheese,	185
Dying Like a Cow Herd,	190
Dairy Stock, Selection and Management, .	134
Dwarf Apple Trees,	144
Diseases in Animals,	290
Dairies, a Day among,	48
Dairymen, a hint to,	292
Dairy Farm of A. L. Fish,	93
Dairy Farmer, Terms of,	114
Dairy Stock,	336
Dairying, Treatise on,	153
Dairy Cows, Irish,	352
Dairy Farmer, Close of Volume,	81
Doctoring Domestic Animals,	147
Dogs, Tax on,	275
Dog Story,	281
Diana Grapes,	91
Draining Gardens,	29
Dyspepsia, Remedies for,	237
Ericsonson's Caloric Engine,	136
Educating Young Farmers,	304
English Dairy Cheese,	335
English Dairy Farm,	335
Elk Domesticated,	335
Eight Reasons for Planting an Orchard, .	335
Frogs and Snails, Trade in,	335

Supplied generously with essays and correspondence, the editors of Volume I of the Dairy Farmer were able to cover many subjects of interest to the readers, as illustrated by the contents pages, reproduced on this and the following page.

CONTENTS.

	PAGE.
Farmers' Club of Little Falls,	66
Farmers' Club Annual Fair,	89
Farmers' Club, Proceedings of,	2
Farmers' Club of Little Falls,	226
Fair of Little Falls Farmers' Club,	48
Farmers' Club of Little Falls, Report of,	307
Farmers' Club of Little Falls,	112
Farmers' Club Report,	340
Farmers' Club of Little Falls,	258
Farmers' Club Report	
Fall Plowing,	280
Fall Plowing,	105
Farming and Trade,	174
Fence Posts, Setting of,	160
Fence Posts, Kyanizing or Burnettizing of,	64
Fence Posts, Mode of Setting,	809
Fruits, Preservation of,	276
Fruits, Their Healthfulness	29
Feeding Meal to Cows,	80
Good Advice,	23
Goshen Cheese,	234
Grapes, the Culture of,	57
Grape Vine Pruning,	248
Grasses and Pasturage,	104
Grass and Irrigation,	178, 187
Grass Crops, Improvement of,	84
Grass versus Cotton,	
Grass Culture,	836
Gypsum as Manure,	299, 312
Grindstones, Care of,	287
Garden of Mr. Backus,	211
Hay, Early Cutting for Milch Cows,	49
Hay, Keeping of,	81
Hay, Measurement of,	247
Hay, Cutting and Curing,	291
Hay, Great Yield of,	111
Hay, Estimating the Weight by Measur.,	
Hams, Curing without Smoke,	285
Hams, How to Keep,	239
Horses, Pasturing of,	183
Horses Diseases of,	
Horse, How to Manage,	
Hogs, Early Fattened,	186
Hops,	254
Homeopathy and Cattle,	334
Inquiries and Answers,	92
Inquiries,	145
Indian Corn for Paper,	249
Irrigating Grass Lands,	239
Insect Intellect,	278
Loss of Casein and Butter,	297
Legislative Agricultural Society, Mass.,	314
Milking,	98
Milk, How it is Condensed,	31
Milk and Cream,	232
Milking by Machinery,	182
Milking Often,	191
Milk Dairymen's Convention,	182
Milk Measures,	38
Milk, Heating and Setting,	295
Milking,	99
Milk, Treatment of,	100
Milk-pans, Inquiries about and Experiment	212, 224
Milk Pans,	45
Milk-pan, an Improved,	67
Milk, Coagulating of,	72, 75
Milk, Composition of,	
Metals, Fusability of,	
Manner of Forming Farmers Clubs, on.,	
Manures,	227, 248
Marl Beds,	186
Maple Sugar,	300

	PAGE.
Milch Stock—Jersey Cows,	284
Milch Cows,	103
Maryland Farming,	216
Needle Work,	30
Night Soil, Preparation of,	302
Night Soil, Composting—Its Value,	286
Orchard Culture,	232
Onions, Raising from Pips,	55
Order and System,	159
Preface,	2
Painting Dairy Utensils,	21
Pine Apple Cheese,	252
Premium List, Little Falls Club,	176
Planting Trees, Spring or Fall,	148
Prolific Cows,	303
Plaster—The Amount of, in Clover,	126
Premiums offered to Dairymen,	220
Proportions of Lime and Sand for Mortar,	
Roots for Feeding Stock,	23
Roots for Feeding, Value of,	
Raising Pigs,	181
Rawhide, Uses of,	189
Rain-water not absorbed by Leaves,	191
Rennet, Properties of,	130
Subsoiling and Deep Tillage,	78
Salt Again,	88
Salt, Essay on,	10
Salt,	251, 258
Salting Meat,	192
Salt as a Fertilizer,	118
Saw-dust for Bedding,	213
Shade Trees in Pastures,	27
Spring Doses,	25
Squashes for Winter,	252
Small Horses,	
Squashes, preservation of,	
Stables Built High,	192
Sand for Horses Bedding,	167
Spaying Cows,	162
Seeds from Syria,	175
Seed Corn, Selection of,	144
Sowing with Both Hands,	146
Stock, Characteristics of,	149
Swine, Rearing and Fattening of,	51
Shingles, Laying Old over New Ones,	55
Soiling Cattle,	62
Soiling,	298
Soiling and Grazing,	294
Sowing Grass Seed,	301
Sowing for Squashes,	274
Soiling of Cattle,	322
Soiling, Will it Pay,	383
Timothy and Clover,	238
Timothy, Best Method of Sowing,	235
Timber, Durability of,	241
Trees, When to Prepare for Planting,	58
Twine for Scare-Crow,	310
Trees—How to Treat Old Apple Trees,	275
The Way to Run a Farm Out,	118
Udder, Inflammation of,	243
Winfield Philosophical Club,	68, 71
Winfield Farmers' Club,	240
Wet Pasture Lands,	94
Wintering Young Stock,	245
Watering Stock,	255
Water Pipes,	141
Winter Feed and Care of Stock,	292
Water Troughs,	121
Work and Play,	
Valuable Cement,	

disease was brought under control by a species of quarantine, but the experience, as reported in the Dairy Farmer, may have been valuable from another standpoint. The article, from the Springfield Republican, reported: "In Europe the owner of a diseased creature was required to give notice to the government under the penalty of a fine. Giving such notice he is ordered to kill the creature and the government pays for it."⁴⁶ More than half a century passed before the United States government took similar steps toward compensated slaughter, but the farmers at least had early notice of what could be done. The European example was especially important when farmers and editors sought to eradicate bovine tuberculosis after 1890. The editors of 1860, however, did not comment on the subject of compensation for diseased and slaughtered animals.

Problems of butter manufacture continually interested the editors. In 1859 the Dairyman's Record had republished articles from the Country Gentleman on the proper way to work butter.⁴⁷ Later that year a learned article appeared in which butter was chemically analyzed. The yellow fat, called oleine, was shown to be the most desirable because it was "the highest flavored, and hence . . . brings the highest price in the market. It is believed also to be more easily digested and appropriated by the animal economy than the white fat."⁴⁸ The nutritional value of butter was thus asserted early, and the importance of "butter yellow" observed long before vitamins were isolated.

In 1860 the editors republished a circular on butter making put out by Benton and Caverly of Boston for those who intended to ship to that market. These suggestions were not greatly different from the usual instructions, except that farmers were warned not to oversalt and not to let the cream exceed sixty-four degrees in the churn.⁴⁹ Any editorial effectiveness in campaigns for high-quality butter increased the income of farmers and probably spread dairying by making it more profitable.

Although a few articles on cheese making had appeared in the Dairyman's Record in 1859, the editors did not really concentrate on the subject until 1860.⁵⁰ In that year one Milo Sutliff, cheese dealer in Cleveland, offered instructions to the dairymen of Ohio on the art of making and packing cheese. This advice was in turn passed on to the readers of the Dairy Farmer.⁵¹ A. L. Fish, newly added to the list of editor-contributors in 1860, decried the use of acid as a coagulator in cheese making. Fish had apparently been

added to the staff in order to contribute technical information on cheese making and consequently offered other bits of advice from time to time. Great attention to cheese making came after 1861.⁵²

In 1856 Gail Borden began producing condensed milk on a commercial scale, but it was not until May, 1860, that the editors mentioned the new industry. Even so, the Dairy Farmer was as alert as many later dairy journals on similar subjects. The account of the Borden process was copied from the Rural New Yorker, more as a curiosity than anything else.⁵³ The editors did not suggest the possible economic importance of the new industry for dairy farmers.

Editors Eager to Educate and Inspire

The Dairy Farmer was, of course, concerned with matters other than dairy production and manufacturing. The editors were fully as eager to educate and inspire as they were to discover scientific facts. As one of them told the Farmers' Club of Little Falls: "Nature never reared 'Flying Childres,' nor 'Flora Temple;' no lordly Durhams nor sleek Devons roam in her forests; no Leichesters nor Southdowns feed in her pastures; no golden cereals ripen on her prairies; no melting fruits load her orchards. But the yellow maize waves its leafy banners, and the tall wheat bends its imperial head in graceful homage to the intelligent husbandman, who, by a new creation, has added these products to the means of human subsistence,"⁵⁴ In this manner were the glory of farming and the virtue of hard work presented to the farmers.

Nevertheless, the editors were by no means ready to laud toil for its own sake. A story copied from the Home Journal gave one of the contributors an opportunity to attack farmers who thought only of making money. Even the choice of title "Dying Like A Cow Herd" suggested contempt for mere money grubbing: "Robert Ferguson, an elderly farmer, living near Utica, New York, died a few days ago. When he became convinced that death was approaching, he gave the most particular directions as to the disposal of his property, and the arrangements for his funeral, and almost with his last breath enjoined it upon his wife and daughter to have the funeral procession leave the house at an early hour, in order that they might get home in season to milk the cows before dark!"⁵⁵ The editor summed up his opinion with the remark that "we are opposed to nursing one idea in the minds of youth, whether that idea be money-getting, cheese

making, religion, politics, or social reform.”⁵⁶ Editorial dislike of the single-track mind also appeared in comments on sectional antagonisms. In fact, the dying cow herd may have been a veiled comment on emancipation fanatics. The editors seldom mixed in politics, but when they did they took a fairly moderate tone. They spoke of crazy philanthropists and fire-eating politicians, but remained firm in the conviction that the workers would maintain the Union.⁵⁷

Eaton had been having business trouble for some time. In the first issue of the Dairy Farmer he had suggested that “Hints from farmers upon any branch of dairying, will be acceptable to us . . .”⁵⁸ His appeal was largely ignored, and at the same time, his corps of writers deserted him. In November of 1860 he complained that “those of our friends who have volunteered to furnish original matter for the Dairy Department of the Farmer, have been derelict and thereby put us to inconvenience. They ought to recollect the inducements offered to the publisher, to continue the work, and to fulfill their part of the engagement. The October and November Numbers have been behind time, but we mean to be more punctual if the Members of the Clubs will do what they have engaged to do in the Editorial Department.”⁵⁹

Contributions did not increase, and on the surface it seemed that the publisher was right. His troubles stemmed from the dereliction of his “editors.” In April, 1861, Eaton unloaded the Dairy Farmer on the firm of Ayer and Brigham, who undertook to continue the publication. Eaton ended his ownership of the Dairy Farmer with a pious, “I hope to witness its continued prosperity,” although the journal was not exactly prosperous.⁶⁰

On taking over the paper, Ayer and Brigham proposed a series of changes calculated to increase circulation:

The reading matter in the work will be increased,—each number furnished with a cover, and in other respects greatly improved. It is believed that a publication in which Dairy Farming is made the leading feature, will prove acceptable at home and abroad.

No agricultural paper in this country treats of this branch of farming as a specialty [*sic*], and there is a want of information in reference to the management of cheese dairies, which the “Dairy Farmer” in part, proposes to supply. The means of furnishing matter of this kind, will be ample,—located in the heart of Herkimer county, a region where cheese making has been conducted long on

a large scale, and where Dairy Products have for years maintained superiority in market.⁶¹

The attention promised the cheese industry was not intended to transform the Dairy Farmer into a manufacturers' journal since the editors mentioned only "cheese dairies." As before, the Dairy Farmer was to be edited by "able writers, assisted by correspondents, who are practical dairymen."⁶² From the beginning, however, X. A. Willard assumed most of the editorial responsibility. Judging from the statement of the publisher, it seemed that the journal was off to a new start.

Nevertheless, there was some difficulty from the first. The paper was sold in April, 1861, but the first number of the second volume did not appear until June, 1861. Incessant appeals for more subscribers, scattered throughout the volume, suggested that the new publishers were experiencing financial difficulties.⁶³ After estimating the cost of publishing, Ayer and Brigham decided to raise the price of the paper to seventy-five cents a year. In addition to the expenses of paper, typesetting, and press work, the publishers also had to pay the editors.⁶⁴ This was the first mention of pay for editorial services. It was probably initiated by the new publishers to solve the shortage of editorial material which had plagued Eaton. In an effort to increase revenue, the publishers announced that "a few Advertisements to be printed on a separate sheet of this paper, will be received upon terms to be agreed upon."⁶⁵ Appeals for advertising had not appeared before.

The second volume of the Dairy Farmer began in much the same way as had the Dairyman's Record of 1859. The first article was an example of local patriotism entitled: "Herkimer County, Its Adaption to the Production of Cheese. An essay read before the Farmers' Club of Little Falls, April 12, by A. Reed."⁶⁶ In other articles the new Dairy Farmer emphasized cheese making. The rise of the cheese factory made the subject pertinent, but the editors directed their attention to home-produced cheese, thus associating themselves with a dying industry.

In 1861 a new technique in cheese making was introduced when L. B. Arnold advocated a rotary curd cutter as tending to reduce waste. Arnold offered detailed instructions on how to make and operate the device.⁶⁷ In the same issue X. A. Willard supported Arnold's new machine. Willard wrote of how formerly the curd had been thrown out with the whey

and drove home the idea of economy.⁶⁸ Thus even this early these two friends began a policy of mutual support which was to endure through many years of association with the dairy industry.⁶⁹

Face Shortage of Scientific Information

The shortage of scientific knowledge was evident in an unsigned article on the use of salt in cheese making. The author reached the conclusion that the curd should be salted in the whey. This idea was based on experience alone, since the author admitted that he was not a chemist.⁷⁰ The editor published the article without comment.

The shortage of articles continued, and in 1861 Willard, the de facto editor, began publishing an article he had written for the New York State Agricultural Society. The essay concerned the history of, and techniques employed in, cheese dairying in Herkimer County. The article ran for three issues in the Dairy Farmer.⁷¹ This expedient of reprinting old works, although not resorted to frequently, had the advantage of filling the journal without too great effort on the part of the editor.

The editors also devoted space to feeding, fencing, care of cattle, and education. There was no extensive mention of cattle improvement and very little on breeds of cattle. There were no articles at all on Durhams, Shorthorns, Alderneys, or Ayrshires. However, the paper did carry some arguments for single-purpose animals. In an article quoted from the American Stock Journal, one of the editors noted the need for single purpose horses:

No intelligent man will pretend that any one breed or class of horses is adapted to all purposes for which the service of this noble animal are required. The truth of this proposition is forced upon us almost daily by the purchases being made for the different places in the army. A baggage horse, cavalry horse, and battery horse are each quite different from the other; and yet, in this country so little attention has been paid to breeding for the different purposes, that no distinct breed is sought for, by purchasers, for these several places. Form, size and action seem to be the distinction made, rather than breed. This is not as it should be, or, as we trust, it will be, before many years have elapsed.⁷²

The article on horses indirectly supported the idea of the single-purpose cow. Although special cattle breeds were not

mentioned, arguments against dual-purpose cattle were taking shape.

By 1862 the shortage of material must have been great, for by some accident, Charles Oyston was able to include an article which unfavorably compared cheese production to the growing of sugar beets. The author explained that sugar beets took nothing from the soil except that which was readily available anywhere, while "cheese, on the other hand, contains considerable mineral ingredients, and consequently impoverishes the soil much faster—in fact every pound of cheese that a farmer sells off his farm, he includes a portion of his farm with it."⁷³ Oyston concluded that soil fertility had to be maintained, but he also hinted that raising sugar beets was possibly as profitable as dairying. In any case, he saw no magic in dairying.

Neither was there any magic in selling cheese. X. A. Willard admitted that formerly there had been a prejudice in England against American cheese. He asserted that dairymen could hold the export market which had been recently developed only by producing superior cheese. He made no mention of the cheese factory, but directed his remarks to the farmer-manufacturer. His column, entitled "The Cheese Trade, Marketing &c," consisted almost wholly of history and farming advice.⁷⁴ Market reports and estimates were still of the future.

In 1862 the Dairy Farmer presented the first clear arguments for commercial dairying, as well as an indication that cheese dairying was well established in Herkimer county. Willard observed that: "The manufacture of the great staple of the County being general and conducted by our farmers on a large scale, crops other than cheese are regarded rather as incidental. Dairymen for the most part purchase their flour, which comes from grain growing districts. A large quantity of grain also for stock feeding is annually imported into the County—many believing that permanent pastures, or those that are yielding fair returns, are best, and should not be broken up, and that a mixed husbandry of dairying and grain growing on the same farm, is less profitable than when the dairy alone is made the chief business."⁷⁵ He noted, as did later editors, that in depressions the dairy farmer was better off than those in other branches of agriculture.⁷⁶

From time to time the editors complained about the westward migration of farm laborers. Of course editors admitted that farming was always speculative and subject to

the hazards of the market, but the editor ran an article which asserted that dairying when combined with the proper use of manure was less speculative than going west.⁷⁷ Willard also reprinted an article from the Scientific American which compared wealth to energy; both were limited and indestructible.⁷⁸ Under such circumstances it profited a man to stay at home and take the largest share he could of the total wealth. The argument was to recur in later dairy journals.

In farm technology, the editors offered articles on a variety of different subjects, ranging from sunken and wire fences to advice on feeding cattle.⁷⁹ Turnips and other roots were suggested as a substitute for hay as a winter feed, while the medicinal qualities of carrots were indicated.⁸⁰ Healthy cows were recommended for good dairying, while evidence was presented to show that abortion was transmitted by bulls.⁸¹

Education continued as one of the minor interests of the editors. In 1860 one of the editors of the Dairy Farmer had inserted a notice of the Yale agricultural lectures.⁸² This, however, was nearly the only notice taken of agricultural education. In 1861 the financial condition of the Dairy Farmer was so precarious that the editor was forced to speak plainly on the subject of book farming. His immediate object was to increase subscriptions, but at the same time he made a strong plea for reading. He asserted that:

There is a prejudice among many of our farmers against any printed matter that has reference to Agriculture. Book farming, as it is termed, is regarded by many very much in the light of some worthless nostrum. Men are so wedded to habit—so adverse to occupying new ground in this profession, that they will not believe that anything, out of their usual practice, can be right, or worth trying. Fortunately, men of this stamp are being overturned by seeing improvements about them... which appeal strongly to the pocket, and from thence to the mind.

The object of the DAIRY FARMER is to point out the best method of cheese dairying—to give to the public all the improvements constantly being introduced as to the manufacture and treatment of cheese while curing.⁸³

First Venture in Dairy Journalism Ends

Willard then went on to ask his readers to interest their

neighbors in the Dairy Farmer, but to no avail. And so it came to pass that Ayer and Brigham were forced to admit that "we are unable to continue the publication of the Farmer without greatly increased expenditures, which its subscription list would not seem to warrant."⁸⁴ Subscriptions paid in advance were refunded, and the proceedings of the Little Falls Farmers' Club were transferred to the Mohawk Courier.⁸⁵ Thus, in May, 1862, the first venture into dairy journalism came to an end.

There were several reasons for the failure of the Dairy Farmer. The subscription list was not large, advertisers were few (the first issue carried only one page of advertisements), and the number of original articles decreased as time went on. The trouble Eaton had experienced was repeated; there was a shortage of material. Furthermore, although the Civil War was not mentioned directly, the editor did comment on the depression of business and the unsettled state of the country.⁸⁶ Undoubtedly war inflation increased the costs of publishing. Meager revenue combined with rising costs made publication unprofitable.

French of the Western Reserve Farmer and Dairyman, the several contributor-editors of the Dairyman's Record, and Willard of the Dairy Farmer, insofar as can be determined, struggled against a shortage of material for publication, a lack of advertisers, and resistance on the part of farmers to book learning. The contents of the journals indicated that they were not very different from the general agricultural periodicals of the time, except that they emphasized dairying somewhat more. Dairy journals had no chance of survival until commercial dairying had begun and until enough new equipment was invented to provide adequate advertising. Dairy journals were not possible until dairying was widespread, and that required increases in city population, improvements in transportation, and new developments in dairy husbandry. More than a decade passed before any serious new attempt was made to establish a dairy paper.

New Source of Dairy Information Found

In the meantime, several events changed the dairy outlook. The Department of Agriculture, established in the 1860's, shortly provided a new source of dairy information. In 1869 the first transcontinental railroad was completed to speed the transportation of products from the West. Eastern agriculture, of the old style, was faced with large-scale

Western competition. The Morrill Act aided in the establishment of agricultural colleges and in time increased the body of speculative and scientific information available to farmers and editors. Floods of immigrants increased the number and size of cities and added to the market for dairy products. By 1880 at the latest, a substantial dairy press was possible.

Meanwhile, there was substantial scientific progress in Europe. In 1865 Gregor Mendel published his pioneer work in genetics, and in the 1860's Louis Pasteur discovered the microbe origin of disease and introduced "pasteurization." These and other developments took place in the years when dairying was practically at a standstill. By 1870, the industry and its press possessed the groundwork for tremendous expansion.

Chapter 3 - Trade, Breed, and Farm Journals 1862-1883

Many Dairy Journals Started

While no dairy journals of any kind appeared between 1862 and 1875, in the next eight years thirteen new dairy periodicals were launched. Of these, nine were intended for farmers or breeders and were, in the place and order of their appearance: the New England Dairyman (Poultney, Vt., 1875); the Monthly Bulletin of the American Jersey Cattle Club (Newport, R. I., 1877); Stock and Dairy Gazeteer (Sibley, Iowa, 1877); the Herd Register (Peterboro, N.H., 1878); Farmer and Dairyman (Utica, N.Y., 1880); Dairy and Farm Journal (West Liberty, Iowa, 1881); Farm and Dairy (Hulmeville, Pa., 1881); Northwestern Farmer and Dairyman (Portland, Ore., 1881); the Dairy Farmer (Chariton, Iowa, 1883). None of these farm-dairy journals lived beyond 1890. In addition, four trade journals were founded after 1877. The American Dairyman (New York, 1877); the Dairy World (Chicago, 1881); the U.S. Dairyman (Chicago, 1882) and the Dairy (New York, 1883). None of these dairy journals are still in existence. Subscribers to the various magazines apparently were not interested in saving copies, and the new agricultural colleges had not yet really begun to collect publications.¹ Consequently, the record for the period is sketchy and incomplete.

Between 1862 and 1875 the economic condition of dairying did not look prosperous enough to attract editors into dairy journalism. On the one hand, the Civil War caused a shift away from the industry, while on the other hand two depressions of rather prolonged intensity, in 1866 and 1873, kept dairying from increasing in importance.² There was a slight increase in the number of cows kept on farms and an

increase in the amount of dairy products manufactured, but these were inconsiderable when compared with earlier or later advances.

Dairymen Weathered Depression Best

On the whole, dairymen suffered less during the depressions of 1866 and 1873 than any other class of farmers. This observation is partly supported by the fact that agrarian discontent was never as vigorous in the dairy regions as elsewhere.³ The profits of dairying were not altogether ignored by the farmers or by the editors of country newspapers. Specialization in dairying became more evident in certain sections of the country after the panic of 1873 began. In spite of the depression, several new dairy journals came into existence during the seventies. Places of publication tended to indicate the location of the stronger dairy regions.

Distances from metropolitan areas determined what general crops were produced in the various agricultural regions. Dairying in the seventies and eighties exhibited the influence of the metropolis over farm production. The several journals, which seemed to come into existence most haphazardly, actually followed a pattern of development which was related to the rise of the city. The regions near to cities were usually devoted to whole milk production, while those at a distance produced butter and cheese. The outermost limits of the dairy areas were partly established by the cost of transportation to the metropolis and partly by the price of dairy products within the city.

Two general developments came from this influence of the metropolis. In the larger cities, produce-merchant journals were founded; and in the dairying territories of the metropolis, farm periodicals were likely to appear. For example, in 1875 the New England Dairyman appeared at Poultney, Vermont. It lasted only one year, but the attempt showed plainly enough what had happened in Vermont. Western competition in wool forced the farmers to turn to another form of animal husbandry, while the market of Boston attracted them to dairying. Thus Vermont took its place among the more important dairy states of the country.⁴

Although dairy farmers and editors were hard pressed financially during the depression of 1873, the middlemen, as was true in subsequent depressions, were not greatly injured. They took their percentage of profit no matter what the cost or price of the product might be. And in the years immediately following the Civil War, the business of produce mer-

chants increased in importance. John D. Rockefeller, Sr., for example, began his business career in a produce company in the early sixties and amassed a comfortable fortune. It was not until the late seventies, however, that enough merchants were engaged in handling dairy products to warrant the beginning of special trade papers. The first of these appeared in 1877 when J. E. Clark established the American Dairyman, Butter, Cheese and Egg Reporter at New York.⁵ Three years later the circulation of the journal reached 1,000, and by 1886 circulation was over 5,000. The subscription price of \$1.50 a year was about normal for the period.⁶

This pioneer trade journal apparently received insufficient support from dairy produce merchants. In 1883 Clark changed the title of the paper to the American Dairyman and at the same time broadened the range in subject matter.⁷ This first attempt at trade journalism was obviously not an unqualified success, and the editor was forced to widen the scope of his subject matter in order to increase subscriptions and attract advertising. Later the dairy produce journals professed to circulate among producers and accordingly were able to secure advertising from commission houses. Unless a paper circulated outside the merchant class, there was little which could be advertised. In 1907 Clark sold the American Dairyman, and shortly afterward it was consolidated with the Practical Dairyman.⁸

By 1881 Chicago was able to support its first dairy produce paper. The Dairy World, founded by the Burch Publishing Company, lasted until 1906 when it was combined with the Jersey Bulletin.⁹ It was, therefore, one of the more enduring periodicals and, judged by the attacks made on it by other journals, one of the more important.¹⁰ In 1888 the journal was sold to T. O. Thompson, an aggressive editor who was generally positive.¹¹ The earliest available copy of the paper indicates that the Dairy World was published for the produce trade and, to some extent, for butter and cheese makers.¹² The relative success of the journal may be attributed to the growth of Chicago and to the increased importance of the dairy industry in the surrounding territory.

In 1882 the Dairy World was followed by the U.S. Dairyman, a sixteen-page monthly, first published in Chicago and intended for produce merchants and butter and cheese makers. By 1888 the paper had a circulation of over 2,500, but apparently neither the number of subscribers nor advertisers was sufficient. In 1888 Thompson bought the U.S. Dairyman and combined it with the Dairy World.¹³

The increase in the number of produce merchants coincided with the development of newly introduced breeds of cattle. In the late seventies the several breeds had enough advocates to support separate journals. From that time on the influence of breeders was constant. Breed partisans kept up a running fight in the dairy press, caused dairy editors to devote large amounts of space to disputes on the virtues of general and dairy purpose cattle, and brought about a reassessment of the objectives in dairy husbandry. Under breeder pressure, the old term of "native cow" was supplanted by the term "scrub," while lesser crosses of breeds became known as "grades." However accurate the new descriptions, they were far from complimentary and showed clearly that cattle terminology was dominated by breeders of pure stock. And when editors sought to improve the quality of dairy cattle, they used the breeder's arguments and vocabulary. These arguments and terms were first given their widest circulation by the breed journals.

Breed Organs Start in 1877

The first of the breed periodicals began in 1877 when the American Jersey Cattle Club undertook the publication of a monthly journal. No editor was named on the masthead of the Monthly Bulletin of the American Jersey Cattle Club, but the journal was edited by one Colonel George C. Waring.¹⁴ In 1878 when the journal was moved from Newport, Rhode Island, to New York, Waring commended Thomas J. Hand, who became managing editor with that issue and who from the first had much to do with editorial policy.¹⁵

In the beginning the journal was meant to support only the interests of Jersey breeders. The subscription price of \$3.50 per annum was twice or three times as much as that of any other dairy periodical. The cost alone was restrictive. In addition, Waring made no concessions to the majority of dairy farmers. As he stated in his first issue: "It is intended to make The Bulletin exclusively and simply an organ of the breeders and owners of Jersey cattle. Irrelevant agricultural topics will not be discussed in these columns; only matters relating strictly to Jerseys—their breeding, purchase, care, usefulness, beauty, etc.—and matter relating to butter-dairying, this being the industry through which the practical value of the Jersey, as an aid to profitable farming, is developed."¹⁶ The editor very carefully emphasized the fact that the paper was only intended for Jersey breeders. It was not meant for ordinary farmers nor was it meant for breeders in general: "It may be well to establish at the out-

set that, while we shall publish the results of comparative tests between Jerseys and other cattle, further reference will not be made to other breeds than such comparisons require; for, to repeat, The Bulletin is to be strictly a 'special' paper, with only the limited aim of conveying such information as may be valuable to breeders of Jerseys and to those who have an interest in the spread of their popularity."¹⁷

The breeders and their editor apparently intended to extend the popularity of the Jersey by concentrating on those already interested in the breed and by supporting the theories of one Francois Guénon. This son of a French peasant had devised a method for determining the milk-producing qualities of cattle. The technique did not employ weighing milk, except incidentally. Rather, Guénon relied on certain markings on the rump of the cow, particularly the lay of the hair, as an indication of her milking capabilities. In 1846 John S. Skinner had been enough impressed with the idea to have a book on the subject translated into English.¹⁸ During the thirty years between 1846 and 1877 the ideas of Guénon had gradually become known to many farmers, and as could be expected, some controversy arose as to the merits of the system. The Jerseys apparently fitted into the class of high producers according to Guénon, but at the same time, some good producing cows were found to have inferior rump marks. Consequently, farmers who did not own Jerseys were not greatly impressed with Guénon or his ideas. This fact caused the editor of the Monthly Bulletin of the American Jersey Cattle Club to ridicule the pretensions of pen and ink cattle breeders like L. S. Hardin, who Waring thought ignored scientific evidence.

In a recent contribution to the Practical Farmer Mr. L. S. Hardin says:

"Of all the unmitigated humbugs that were ever imposed upon a long-suffering and patient people this Guénon theory of the milk-mirror is the greatest."

The boldness, confidence, and freshness of this statement are almost enough to deter one from saying anything which might touch the bloom of its youthful cheek. That we are a great people has long been obvious, and no indication of our superiority to the effete nations of Europe is more marked than our ability to determine, at a dash, difficult questions which have been painfully solved by our cousins across the water in accordance with systems of reasoning and rules of evidence which their narrow and

restricted training has led them to consider necessary. It needs but the strong blood, the quick intellect, and the confident manliness of a young people, whose home is in the setting sun, to overthrow with one sweep of the pen the logical deductions of those senile peoples who base their conclusions upon cumulative proof and the experience of many years.¹⁹

Waring then went on to give a biography of Guéron. He also stated the theory in great detail and in subsequent issues returned to the subject with almost as much vigor.²⁰ Obviously, he had concluded that if the theory of Guéron were widely accepted, the fortunes of Jersey breeders would be made.

Support of Guéron was only part of the editorial program outlined in the first issue. In that number, July, 1877, the journal was composed in the proportions of five pages of subject matter, two pages of transfer records for cattle, and twenty-eight pages of pedigrees and registrations. There was one page of advertisements. By July, 1879, the reading matter had increased to thirteen pages, but the ratio of the rest of the magazine remained practically unchanged.²¹ The journal was clearly designed more as a record of Jersey cattle than as a vehicle for dairy information. But there was some information on dairying included in the journal. Articles ranged from advice on the treatment of the dairy cow to arguments showing the superiority of Jerseys over Shorthorns.²²

The policy of confining circulation to Jersey breeders led to financial difficulty. The journal might have prospered if all Jersey breeders had subscribed and advertised, but few of them did. In November, 1878, the Monthly Bulletin was moved to New York, and at the same time an effort was made to secure greater circulation. To accomplish this, Waring proposed to handle a wider range of subject matter: "Mr. Hand and I will henceforth do our utmost to raise the standard of the Bulletin, and to secure for it a general recognition as the organ of the Jersey breeders of America; as a valuable source of information for butter-makers; and, incidentally, as an intelligent exponent of whatever may be of professional interest to those engaged in dairy farming."²³ The reason for this approach was explained fully enough by the next paragraph: "We need more subscribers and we will need more advertisements. All who may aid us in these respects will render a service not only to us but to the cause we advocate."²⁴

In carrying out the policy of covering a greater range of subject matter, the editor attacked oleomargarine manufacturers. This product had recently been introduced from France. Sometime in the 1870's, probably after the Communard insurrection in Paris, French scientists began serious work to find a substitute for butter. They eventually succeeded in making a product from lard and tallow, which, when properly colored, was no more offensive to the taste than much butter of the period and was cheaper to make.²⁵ The manufacturing technique was such that small producers could enter the market and sell the substitute as butter. At the same time, the large packing houses had a valuable outlet for animal by-products. In 1880 the Monthly Bulletin of the American Jersey Cattle Club condemned the new substitute. The editor indicated that the subject had been discussed previously both in print and out. In his attack the editor used new information about microbes, chemistry, and pasteurization, but not with great effect. He was on more familiar ground when he echoed the common American distrust of corporations. Although the first editorials did not cover all phases of the subject which subsequent editors handled, the treatment was vigorous. It was perhaps natural that the Jersey breeders who prided themselves on having a butter-producing cow should have been the most concerned. Their editor noted:

This counterfeit of butter is being pushed with brazen effrontery upon the market, both in this country and in Europe. It is manufactured by large corporations, who have given a new proof of the saying that "Corporations have no souls," and, in this case, no decency. We gave, some months ago, the statements of microscopists to show that it is easy to distinguish it from genuine butter under the microscope. Oleomargarine shows "feathery crystals," and real butter "presents the uniform appearance of fat globules, perfectly free from any crystalline forms, except those of chloride of sodium or common salt."²⁶

Opposition to oleomargarine, even when combined with a greater range of subject matter, was not enough to sustain the journal indefinitely. In June, 1881, the editor found that "the publication of the Bulletin absorbs a larger proportion of the funds of the American Jersey Cattle Club than it is prudent longer to divert in their direction."²⁷ In the last issue of the Monthly Bulletin, the editor took what comfort

he could from the observation that "Jersey interests are now established on such secure foundations, and the value of the breed is so generally and so widely appreciated, that in future it may be safely left to the effect of the impetus it has already received."²⁸ Thus the first breed journal died in 1881.

The second breed journal in the United States continued publication for a longer period than the first, but left a less perfect record of its existence. Sometime in 1878 the Herd Register was begun at Peterboro, New Hampshire. This paper was published irregularly, but five volumes appeared between 1878 and 1883. The journal died in 1883, but was succeeded by the Herd Register and Breeder's Journal of the same place in 1884.²⁹ Apparently the Herd Register did not have a large or influential circulation, since it was not mentioned either in Rowell's American Newspaper Directory or in Ayer's Newspaper Annual.

Journals for Farmers Appear

At the same time that produce and breed journals were appearing in the larger cities, a cluster of small, weak magazines appeared in the smaller towns. These generally fell within the dairy trade areas of the metropolis, that is, in or near the hearts of the various dairy regions. As a rule their contents were quite similar, and the whole class may be illustrated by the Farmer and Dairyman.

The Farmer and Dairyman, owned and edited by T. D. Curtis, was first published at Utica, New York, in 1880, appeared monthly, and cost fifty cents a year. In April, 1881, Curtis moved the paper to Syracuse, New York.³⁰ The editor kept up-to-date on problems of breeding and dairy technology. Like most editors of the period, he supported local products in his editorial columns. Local salt was one of his favorite topics, a subject which he sometimes combined with attacks on railroads or foreign salt producers.³¹ Curtis also devoted some space to such matters as free trade and railroad legislation. In one of his concise editorial quips he remarked, apropos of free trade: "We can set it down as a dead sure thing, that what England wants us to do, politically or commercially, is the very thing we ought not to do."³² Curtis combined this idea with a complaint against railroads all of which he viewed as a part of English intrigue.

Very cunningly the railroad interest, aided by mercenaries of English free traders, make war upon our canals.

They have succeeded in making the Legislature and Canal Board abolish the tolls on westward bound freight. This is but the First step toward abolishing tolls on eastward bound freight also, and toward the era of free canals, supported by a tax on an already overburdened people. Free canals will soon lead to no canals, and place us entirely at the mercy of the railroad monopolies. There is no more justice or reason to free canals than in free canalboats or free railroads, sustained by a general state tax.³³

In general, the other farm papers of the period followed the three main leads set down by Curtis. They opposed England, they fought the railroads, and they supported coöperative efforts.³⁴ These programs, however, were not enough to keep a journal alive, since other farm papers disappeared. Curtis himself was hard pressed. In 1886 he sold the Farmer and Dairyman to the Dairy World of Chicago.³⁵

Because of certain natural advantages in livestock raising, plus nearness to the Chicago butter and cheese market, dairying was profitable in Iowa after about 1870.³⁶ A natural result was the development in 1881 of the first Iowa dairy journal, the monthly Dairy and Farm Journal, published by J. Maxon and edited by James Morgan at West Liberty, Iowa. It ceased publication some time in 1887, dying as quietly as it had been born.³⁷

In 1883 Robert Marshall, a practical Iowa farmer, joined with the Temple brothers of Chariton, Iowa, to found the Dairy Farmer.³⁸ After the manner of Iowa journals, the paper was interested in dairying only as a phase of stock raising. The masthead identified the paper as "a 16 page monthly giving special attention to the dairy interest of the West, and at the same time, a reasonable amount of reading matter on other farm topics."³⁹ The journal was published at Chariton, Iowa, until 1891, when Marshall sold the paper to H. C. Wallace of the Farm and Dairy of Ames, Iowa.⁴⁰

Meanwhile dairy journals for farmers appeared in western Pennsylvania and Oregon. In 1881 the Farm and Dairy appeared at Hulmeville, Pennsylvania, but died either in 1881 or early 1882.⁴¹ The Northwestern Farmer and Dairyman, begun in Portland, Oregon, in 1881, lasted a little longer. Between 1884 and 1888, however, circulation dropped from 4,000 to 2,000 and the number of pages from sixteen to eight. The journal ceased publication in 1888.⁴²

The publication generally indicated the locations of the

new dairy regions, but the papers were short lived and their influence probably slight. The editors may have been too much impressed with the dairy potentialities of their respective regions. Their confidence was not entirely misplaced, but their efforts at journalism were premature.

Most of the dairy farm papers before 1883 were brought into existence by the cooperation of a prospective editor and an established publisher. In no instance was the connection between the dairy journal and its related country newspaper as close as between the Dairyman's Record and the Mohawk Courier in 1859. The country editors appeared willing to print the paper, and on occasion to direct its business affairs, but they did not edit the journals. Even the Dairyman's Record of 1859 did not exhibit the unusual circumstance of one man directing both the dairy journal and the county paper. Therefore, when the Franklin (New York) Register of Joseph Eveland changed title to the Delaware County Dairyman and Register in 1883, the editor broke with tradition. At the same time, he became a minor forerunner of Hoard's Dairyman, which appeared several years later.⁴³ Joseph Eveland intended to establish both a county newspaper and a dairy journal. Although the paper was still in existence as the Delaware County Dairyman as late as 1950, the attempt was not entirely successful.⁴⁴

On the whole, few successful dairy journals were created before 1883. Some, such as the American Dairyman and the Dairy World, continued publication into the twentieth century, but their periods of influence and prosperity came after 1883. Farmer publications were incapable of long life during the years immediately after the Civil War. The dairy industry was still on unsure foundations. The general agricultural papers carried a large amount of dairy information. And either the farmers were uninterested in book learning or else the dairy papers were of inferior quality. The breed journals, although not intended for real farmers, exhibited about the same number of failures as the general dairy papers.

Whatever the causes for their failures, the dairy journals of the period were not remiss in their duties to the industry. Innovations in dairying came rapidly between 1870 and 1883, and the dairy journals quickly passed information on them to their readers. The editors particularly supported new techniques in dairy farming, cheese and butter making. One of the earliest improvements in dairy farming was the invention of the silo. This method of feed preservation was

most significant because it reduced the amount of labor and storage room needed to store roots or hay, it provided a succulent cattle feed, allowed the farmer to keep more cattle without increasing the size of his farm, and assured a fairly regular flow of milk during the winter when milk prices were high. The silo was without doubt one of the major advances in the long history of dairy husbandry. The first silo was developed in France, from whence it spread to the United States in the early seventies. One of the first American silos was built by Manly Miles, of the University of Illinois, in 1875.⁴⁵ The first mention of the silo in a dairy periodical appeared in 1879 in the "Book Notices" section of the Monthly Bulletin of the American Jersey Cattle Club.⁴⁶ The reviewer of The Ensilage of Maize and Other Green Fodder Crops by Auguste Goffart (Paris, 1877) enthusiastically championed the system outlined in the book. He asserted that it was the best work on ensilage up to that time. He recounted the previous attempts to perfect ensilage, and insisted that the system of Goffart was the most practical.⁴⁷ In 1881, T. D. Curtis of the Farmer and Dairyman (Syracuse) introduced his readers to the latest work on the subject with the remark: "We devote considerable space this month to the publication of Dr. F. E. Englehardt's paper on Ensilage. It is complete and exhaustive, giving all that is scientifically known on the subject. Our readers will find it valuable for reference."⁴⁸ The editors were enthusiastic about the silo, but its use did not spread very rapidly.

The small but growing threat of oleomargarine also attracted editorial attention for the first time. The era was one of general adulteration of foods and plundering of the consumer by large corporations, and therefore, the battle against oleomargarine took on the general aspect of reform. Because of the connection between lard and oleomargarine, early dairy editors directed most of their attacks against the packing industry.⁴⁹ At the same time, the new science of microbiology was invoked to prove that microorganisms were found in oleomargarine and that the heat to which oleomargarine was subject in the manufacturing process was not great enough to kill bacteria.⁵⁰ Since competition from oleomargarine was not really serious during the seventies, the editors did not often press their attacks vigorously. One editor even hinted that the disturbance over oleomargarine did not come from the dairy industry at all. T. D. Curtis suggested that fear of the substitute was to some extent manufactured. As he remarked in 1881: "There is a great

cry about butter frauds, and some honest dairymen are contemplating the possible result in dismay. But we notice that the greatest cry comes from sources that have the least real interest in the purity and prosperity of the dairy. They use it as a tail to their kite, which they fly for the purpose of advertising wares which they want to sell to dairymen."⁵¹ Later editors were to take a less hopeful view of the problem. Nevertheless, by 1880 battle had been joined.

Separator Advertising Supports Journals

At the same time, the dairy editors cautiously supported technical improvements within the industry. By 1879 the first successful centrifugal cream separator appeared in America.⁵² The editors were wary of the new development, but they did express general approval. As the editor of the Farmer and Dairyman wrote in 1881: "The experience of the past season with the centrifuge has been satisfactory, we believe, and led to some improvements. But it is still too expensive for any but the largest private dairies, and too slow for large factories, besides being too expensive. It is evidently not yet a perfected machine."⁵³ The new centrifugal cream separator was more efficient than the old so-called "gravity" process for collecting cream, but economic problems prevented it from being accepted immediately. As the cost of the several types of machines declined and as their efficiency increased, the editors supported their use. The variety of machines created fierce competition between manufacturers, and thus separator makers became important advertisers in all dairy papers. In the long run, the centrifugal separator not only assisted in the advance of dairying by making it more profitable but also went far in supporting the dairy press. After 1883 even the most tentative venture into dairy journalism could obtain several separator advertising accounts.

The term "survival of the fittest" made a late appearance in the dairy press. Although the ideas of Darwin and Spencer had been presented by 1860, the editors avoided reference to evolution until the late eighties. No doubt they were aware of the possible personal applications of the theory, and this, rather than ignorance, explained part of their reluctance to speak of the new doctrine. In a period when many journals were begun, but few lasted any length of time, it was uncomfortable for editors to suggest that only the fit survive.

Problems of Breeding Considered

Furthermore, theories of natural selection and survival of the fittest ran counter to the prevailing editorial ideas on dairy stock improvement. Farmer acceptance of natural selection might have hampered the campaign for human selection. Curtis of the Farmer and Dairyman emphasized this flaw in Darwinian logic: "Improved conditions, as well as 'survival of the fittest,' make improved dairy stock."⁵⁴ The fact that the editor made the comment, almost gratuitously, suggested that the idea of natural selection had taken some hold of the farmers.

As the dairy journalists viewed the problem of breeding, the chief objective was to improve the scrub stock by any and all means. But, in accordance with the notion of evolution, improvement would take place only as rapidly as farmers could do it naturally. In 1882, Curtis, for example, wrote that: "We must work in accord with the laws of Nature; then Nature will work for our benefit."⁵⁵

In common with the general agricultural periodicals of the period, the dairy editors stressed cleanliness in the dairy. The specific directions they gave indicated what they thought were the worst abuses. The repetition of various injunctions showed that although progress toward cleanliness was slow, it did occur. For example, the rule that milkers should not wet their hands in the milk was continually stressed until use of the milking machine became widespread.

In 1878 the directions of the editors were hardly different from those given in 1819. In an article lifted from Colman's Rural World, the editor of the Monthly Bulletin of the American Jersey Cattle Club admonished his readers: "When seated by the cow ready to milk, hang the pail upon the left arm, and then with both the right hand and forearm brush the bag thoroughly. If there is moisture upon the udder, clean it with sponge and water. Never allow the hands or udder to be wet with milk before milking. This is a filthy practice. If there is anything that should be done quickly upon the farm, it is the milking. No visiting or story-telling."⁵⁶ Later journals pointed up the dirty habits of manufacturers.

Although war and economic distress characterized most of the period from 1862 to 1883, nevertheless dairying made notable progress. The silo and centrifugal separator multiplied the profits of dairying by increasing productivity per man. At the same time, a gradually aroused interest in improved breeds increased the productivity per cow. In addi-

tion, the large increase in the number of dairy cattle between 1870 and 1880 indicated that more farmers were engaged in dairying.⁵⁷ The industry was spreading. Even more importantly, the production of cheese factories and creameries expanded during the same period.⁵⁸

The new developments in marketing and technology naturally influenced the dairy press. Between 1877 and 1883 the journals for produce merchants and breeders came into existence. Both were to present new ideas to the dairy industry. Meanwhile, the invention of the separator added greatly to the advertising revenue of the papers and gave them new financial strength. Even the competition from oleomargarine benefited the industry and its press. At least all segments of the dairy industry were required to keep alert to meet the competition. The year 1883 closed one era in the history of dairy journalism. The period of initial trial was over.

Chapter 4 - The Dairy Farm Journals 1883-1885

Early Dairy Farm Journals Died Young

Although many dairy farm journals appeared before 1883, none of them lasted long. The only successful dairy journals had been trade publications. Between 1883 and 1885, however, dairy farm journalism became established. Altogether six dairy journals were launched between 1883 and 1885: the Jersey Bulletin (Indianapolis, Ind., 1883-); the Democrat and Dairyman (Waterloo, Wis., 1884-1905); Herd Register and Breeders' Journal (Peterboro, N. H., 1884-?); Hoard's Dairyman (Fort Atkinson, Wis., 1885-); the Guernsey Breeders' Journal (West Chester, Pa., 1885-87); and the Farmer and Dairyman (Portland, Ore., 1885-87). Of these, the Jersey Bulletin and Hoard's Dairyman are still being published (1953). D. H. Jenkins of the Jersey Bulletin and W. D. Hoard of Hoard's Dairyman became leaders of opposing camps in the dairy industry and fought more or less continuously from 1885 to 1910. These quarrels often centered on important issues (such as the use of artificial butter color), and the results of the conflicts between the two leaders often influenced the development of the industry.

The Jersey Bulletin was first published at Indianapolis in October, 1883. Dennis H. Jenkins, owner and editor until 1912, began his weekly with only \$350. He had no knowledge of printing, possibly little of writing, and only the most casual acquaintance with Jersey cattle.¹ He had, however, noted that breed magazines had been popular in the United States, and he also realized that Jersey breeders—mostly gentlemen farmers—were able to support a periodical.² His decision to begin a breed journal apparently rested primarily on these observations.

Jenkins charged two dollars a year for the Jersey Bulletin and for several years hovered on the edge of insolvency.

But by 1886 he had a circulation of 1,500, and by 1887 over 3,000.³ In 1885 he regularly carried two pages of advertising in each issue, which was barely enough to maintain the publication. In spite of this uncertain beginning, the paper prospered and is still being published. This extended life made it the oldest journal in continuous existence in the history of American dairy journalism.

In 1885 William D. Hoard established Hoard's Dairyman at Fort Atkinson, Wisconsin. Hoard had been publishing a country weekly, the Jefferson County Union, since 1870. In November, 1872, he began a special column for dairy topics in his Jefferson County Union, and in 1885 the first issue of Hoard's Dairyman appeared as a four-page supplement of the parent paper.⁴ Hoard announced: "We send out this week several thousand copies of "Hoard's Dairyman," our new dairy paper. Every farmer interested in dairying, should become a subscriber at once. Remember, you get 52 copies for only \$1.00 and the same for only 75 cents in clubs of 20 or more. . . . Now is the time to subscribe."⁵ At the end of the first year Hoard's Dairyman claimed a subscription list of 700, in 1886 this had doubled, and by 1889 total circulation reached 6,000.⁶ During the early years, the Dairyman was probably supported, at least in part, by the Jefferson County Union. From 1889 on, however, the paper was apparently clear of financial trouble. It subsequently became the leading dairy farm paper of the country.⁷

In 1885 the Philadelphia Guernsey Breeders' Association decided to promote the breed by publishing a journal. The members of the association promised support for the new venture and asked Willis P. Hazard to edit the magazine.⁸ The Guernsey Breeders' Journal, published monthly at West Chester, Pennsylvania, consisted of twelve pages, cost one dollar a year, and was intended for farmers as well as breeders.⁹ Since the Guernsey Breeders' Journal was supported by an association, it could afford to sell at a lower rate than the Jersey Bulletin. At the end of the first year Hazard resigned as editor. The paper then ceased publication for about five months while the Philadelphia Association negotiated with the national association. These negotiations failed, and so in 1886 the Philadelphia Association agreed to guarantee a subscription list of 600, and with this promise secured Mason G. Weld as editor and publisher. The revived paper appeared as the Guernsey Breeder and Milk Journal on May 1, 1886.¹⁰ The journal soon encountered financial troubles. Late in 1886 the editor asked: "Will the

Guernsey Breeder be continued? This is for our readers to say. We shall publish two more numbers to complete the year We need, however, a considerable increase in the subscription list to put the Journal on a paying basis."¹¹ In July, 1887, Weld died and the journal ceased publication. As a substitute for the publication, the American Guernsey Cattle Club contracted with Hoard's Dairyman to have a column devoted to Guernseys. In return, the club agreed to subscribe to the Dairyman "at regular rates."¹² The next important Guernsey periodical did not appear until 1910.

The editors seldom kept news and opinions separate. When the editors favored or opposed some idea or method they said so immediately upon reporting the news, not several pages later in a space reserved for editorials. The editorial page, if there was one, merely restated their case or introduced new ideas. Occasionally the editors missed or misunderstood a few new dairy developments. For example, before the 1890's all the editors except Hoard ignored the possibilities of refrigerated railroad cars for transporting dairy products. The frequent changes in churns were often so unimportant that the editors failed to note each new improvement. For the most part they concentrated on simple improvements in dairying. They presented each general program a little at a time and waited for the farming community to adopt the new ideas before they presented more. For instance, the program for cattle improvement began with an attack on the native cow. After advocates of the native cow had largely disappeared, the editors had to decide between dual - or single-purpose cattle. Once the several editors had made their decisions in favor of single-purpose cows and had secured support in the farm community, they were then able to urge the application of Mendelian genetics. The amount of time required in this process can be seen in the fact that although the theories of Mendel were known in 1900, the dairy editors made no use of them until the 1930's.

During the 1880's and 1890's dairy periodicals were often belittled or ignored by farmers. Editors needed both good business sense and a determination to be heard in order to keep their papers solvent and operating.

Editorial Interests Were More Alike

Although the Jersey Bulletin, the Guernsey Breeders' Journal, and Hoard's Dairyman experienced different financial problems and were unlike in specific objectives, their

TABULATED PEDIGREES OF CATTLE.

Registered in A. J. C. C. H. R., furnished in good style for 80 cents. Also Butter Records of the ancestry of same, 50 cents each. A discount for a number of each. 13-11 J. A. RANKIN, Lanesville, Pa.

SMALL'S CALF FEEDER

This NEW article is appreciated and approved by all progressive Farmers. It is a perfect natural way, driving as well as when fed on its own mother. Circulars free. **SMALL & MATTHEWS,** 91 South Market Street, BOSTON, MASS.



WANTED.

I am in need of a good practical milker and a butter maker; must be sober and industrious, and above all things clean. Will furnish free, house and fuel to the right party. Address

M. C. CAMPBELL,
Spring Hill, Tenn.

BULL FOR SALE.

Dropped April 22, 1886. Solid color.

Baron of St. Lambert 2286.
\$1,400 at auction.
Maid of St. Lambert 2771.
23 lbs. 15 1/2 oz.

Trinket's H-go Fagus 16604.

Orange Skin 1216.
Sired Ruth H. 16 lbs. 11 oz.
Gold Trinket 9127.
16 lbs 2 oz. Dam of 4 cows in 14 lbs list.

This young bull is very long, deep in the carcass, on short legs, rich shide, and handsome.

Apply to **BETH WADSWORTH,**
20-4 79 Clark St., Chicago, or Elmhurst, Ill.

Butter Tests

-OF-

JERSEY COWS.

By **MAJOR CAMPBELL BROWN, CAPT. T. H. MALONE** and **MR. W. J. WEBSTER.**

Special Features of the Second Volume:

A discussion of the whole subject of Testing—The value of a Weekly Test as an indication of the Dairy Value of a Cow—The Different Modes of Making Tests—Their Relative Significance—The Preparation of Cows for Tests, as distinguished from ordinary Dairy Treatment—The Proper Mode of Comparing Tests—The Value of Tests in Selecting or in Feeding Butter—The Variations Possible in Varying Qualities of Butter, an entirely new discovery in this direction.

Another is the very convenient Consolidated Indexes, which include all tests in Vols. I. and II. In the general index of cows, Vol. II, the test will be stated after the number and before the page where it occurs, thus:

Allie Minka 2282, Test 14 lbs. 6 oz. 129

We truly believe it will meet the wants of all who wish to inform themselves of the past workings of Jersey cows.

Price, \$1.00 per volume, except to those who have paid \$5.00 for Vol. I, when it will be furnished by us at \$3.00. Vol. I reduced to \$2.00. Send all orders to

THE JERSEY BULLETIN,

Indianapolis, Ind.

CREAM COTTAGE HERD OF JERSEYS

Served by the Eurolas bull, Jersey Darling, 4376 the Coomassie bull, Island Valeur, 5614; Jersey Belle of Solitude bull, Ray Yama, 11401; Cumberland 24 bull, Penn Wayne, 13248. Address

J. S. BOOBER,
Paterson, N. J.

ST. HELIER OF IDLESIDE 12200

Seventy-three and 11-100 per cent of the blood of St. Helier 25. One of the very low lying bulls with over 70 per cent of the blood of St. Helier 13. Heals the Pitsgrove Herd of Jersey's. Service for 5.00 a kg of cows, \$2.00 a week.

M. J. PAULDING, M. D.,
Dartmouth, Salem Co., N. J.

SIGNAL 1170

SIGNALS A SPECIALTY.

Infused signal bull at head of herd. The blood elements in signal are represented in more cows of the 14-b. class than any other strain can show. Examples of all ages for sale, including infused signal bull calves.

G. W. FARLEE,
Trenton, New Jersey.

FOR SALE BULL CALF.

Solid color, full black points. Very handsome Sire,
RANKIN'S STOKES POGIS.

—Dam—
Minka 3rd, 16 Pounds.

Five months old. **JOS. A. MOORE,**
Indianapolis, Ind.

DUTTON GRINDER



Can be carried into the field and attached to Mowing Machine Wheel. Send for Descriptive Circulars. Agents wanted in every County.
R. H. ALLEN CO., 189 Water St., New York.

FOR SALE.

A very choice heifer calf, dropped February 13, 1887, sired by Munday 1291, son of Tormentor 3324, and Silver Rose 4231, 16 lbs. 14 oz.; dam, Moquette 6673, dam of Dieta 2195, 14 lbs. 1 1/2 oz. on first calf. Address

Or **Fairfield, Essex Co., N. Y.**
H. EDGAR MASON, 21 Park Row, N. Y. City. 1154

\$300 REWARD WIFE

to any person that can furnish an Automatic Swinging Straw Stacker that can do better work than the **IMPERIAL STACKER** that we are building. Send for circular and price list which will be mailed free. All are warranted to do good work or no sale.
NEWARK MACHINE CO., Columbus, O.

FOR DAIRYMEN, ATTENTION! TO

STOPPAGE OF COWS' TESTS.

Dr. Horne's Improved Instrument.

For opening obstructed tests in cows; in general use in the United States and Canada. So far not one complaint, simple and effective always, even in the hands of the novice. Also a dilating tube for hard milkers and sore tests, \$1.50 each by mail, with full printed instructions. Also a mouth-pag for choking cows, by mail, \$1. Please ordering always must enclose at least one stamp. Please mention **JERSEY BULLETIN** **J. M. HORNE, V. S., Jancenville, Wis.**

Jersey Cattle In America.

—BY—

JOHN S. LINSLEY, M. D.

Seven Hundred and Forty-two Pages, One Hundred and Twenty-six Illustrations, including Seventy Portraits of Choice Jerseys.

Beautifully printed on heavy calendered paper, and well bound. It is a treatise on Dairy Farming, Breeding, Management and Medical Treatment of Cattle the Arts of Dairying and the Weather, with the most complete Statistics of Jersey Cattle.

Price, Half Russia, - - - \$10.00
Extra Cloth, - - - 8.00

The Jersey Bulletin.

THE JERSEY BULLETIN. ONE YEAR FOR \$2.00.

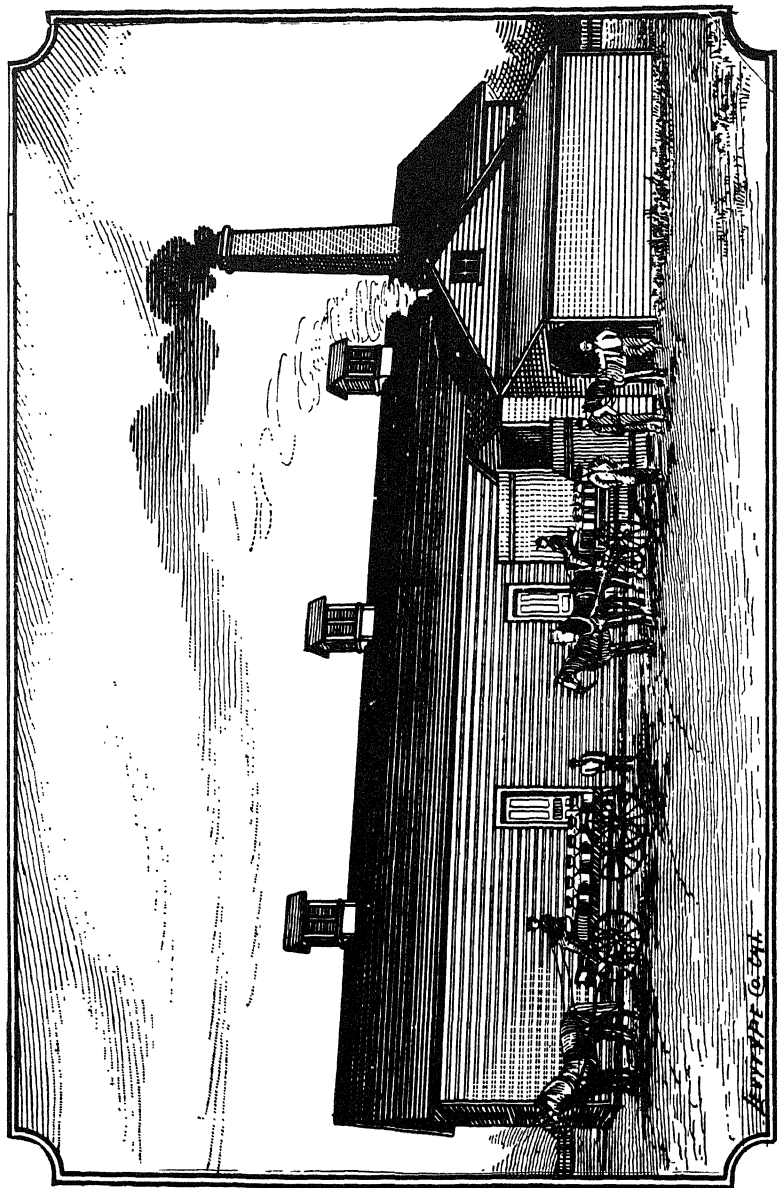
FREE An elegant ST. HORSE BRUSH with every \$1. Package. A Fine 40 ct. CURRY COMB with every 50 ct. Package.

THE UNION LIVE-STOCK TONIC.



This Tonic cures all ailments of the blood, restores the natural softness, denseness, purifies, tones up the system, combats the action of disease, and by aiding digestion, increases the flesh and improves animal's condition. Packed in boxes so secure, it retains its strength for years. Each 50 ct. package contains 8 boxes of 2 doses each, each 24 packages 8 boxes of 3 doses each, 24 packages, expelling all parasites. If you can not procure this Tonic from your dealer, send your orders direct to the **UNION LIVE STOCK TONIC CO., INDIANAPOLIS, IND.**

Advertisement page from June 15, 1887, issue of the Jersey Bulletin. At this time the editors kept advertising separate from reading matter. There were no "next to subject matter" positions. Note the wide variety of articles advertised.



The Jesup Relative Value Creamery, Jesup, Iowa, from February 1, 1891, issue of American Creamery.

chief editorial interests were the same. All the journals outlined various methods for manufacturing dairy products. Even the breed journals carried information on cheese and butter making, although not as much as farm journals like Hoard's. Some cheese was homemade in the 1880's, but the editors generally emphasized the more common factory. In most cases the factories were assumed to be farmer owned or directed. Therefore, farm periodicals mentioned both problems of cheese making and of factory management.¹³ Thus Hoard's Dairyman advised farmers that: "The first most important step to be taken to produce first class cheese is to secure the services of a No. 1 cheese maker and this is not one of the easiest things to do either. A first class cheese maker combines all the qualities of a scholar and should be a constant student. It is not positively necessary that he should be a graduate of Yale or Harvard although the better his education the better fitted is he for his business."¹⁴

These and other journalistic observations departed from what earlier journals had suggested on cheese making. And there were changes in method. Rennet was no longer cut from the stomach of a calf, the wooden tub was not used to set milk, and the curd was no longer cut with a wooden knife.¹⁵ These and other details of cheese making had changed so much that the editors seldom gave specific instructions except in occasional articles. In these instances everything was explained for the benefit of cheese makers. Hoard, for example, complained that quick marketing of the product prevented cheese makers from learning much about curing and at the same time prevented them from knowing what, if anything, was wrong with their cheese.¹⁶ Editors emphasized experience, because there was little in the art of cheese making which could be formally taught. Trial and error were the chief guides. The process moved into the factory but was still largely a commonly unknown science.

The editors deplored too much churning and too much butter working. They were well convinced that either extreme broke the fat globules and caused the butter to spoil.¹⁷ As the editors saw it, however, oleomargarine posed the greatest problem for the butter industry. The Jersey Bulletin noted that oleomargarine had to be colored in order to sell. Jenkins, confident of the natural yellow in Jersey cream, stoutly opposed coloring butter artificially. He argued that if all color were forbidden, oleomargarine would be killed and the Jersey breeders would profit.¹⁸ The Guernsey Breeders' Journal advanced the notion that butter

makers had only themselves to blame for oleomargarine competition: "... the practice of coloring milk and butter to suit the demands of fashion or trade has led to butterine and oleomargarine—the farmer, by using annatto and cream to make his butter, enables the chemist and merchant to go one better, and dispense with the cow altogether."¹⁹ Hoard, in contrast, reduced the problem of colored butter to a simple question of sensible marketing. He declared that "coloring butter is not a fraud any more than coloring cloth, or painting a house or barn is fraud. It is simply a question of taste."²⁰ The several opinions on artificial butter color remained opposed and unchanged, although the position taken by Hoard was the one which the dairy industry eventually supported.

Editors Oppose Manufacture of Oleomargarine

Colored oleomargarine was, of course, a different matter. Here the editors saw eye to eye. The substitute was a fraud; a dangerous, unhealthy, and unethical fraud. As Hoard, for one, insisted, oleomargarine was of no benefit to anyone: "The butterine men claim to be benefactors of the poor man in furnishing him a wholesome, nutritious and cheap substitute for butter. As a matter of fact they furnish a cheaply made imitation which is fraudulently sold to him as genuine, and at the price of genuine dairy, or creamery butter, and which, in its composition may and often does, contain ingredients wholly unfit to be taken into the human stomach."²¹ In order to protect the public as well as the dairy industry, the Jersey Bulletin urged federal and state control of the substitute product unless it was marketed under its own name.²² This approach was rather mild for D. H. Jenkins. Apparently he did not greatly fear the substitute in 1885. W. D. Hoard, on the other hand, had less confidence in human integrity. He believed the manufacturers would never sell the product honestly. He demanded that the legislators of Wisconsin do something "for the protection of the interest of the people ... against such iniquity."²³ The Guernsey Breeders' Journal, although perturbed by increased sales of oleomargarine, offered no solution to the problem.²⁴

Although the editors of the journals could not agree on a program of oleomargarine suppression, at least they were united on one point. They hated oleomargarine. Their disagreement on the use of artificial coloring was understandable because there were reasonable arguments on both sides of the question. Between 1883 and 1950 dairymen never

united on the problem. Some continued to regret that butter was artificially colored because as a result opposition to colored oleomargarine was harder to justify. On the other hand, some felt that Hoard had been right in 1885; oleomargarine, not artificial color, was the chief offender. No matter what their stand on artificial color, all editors agreed that oleomargarine competition had to be met by superior dairy products. In order to produce superior commodities, two conditions were required. Manufacturing had to be carefully done, but just as importantly, the most productive types of cattle had to be used. There was agreement up to this point, and then, as in the past, the editors disagreed on which breeds were most productive.

Consider Problems of Breeding

In breeding, the Guernsey Breeders' Journal was exceptionally interested in sex determination. Although there was no proven way of reducing the number of bull calves born, farmers and editors still hoped that some solution would be found to this problem. Sex determination was particularly important to owners of Guernseys because the calves were not very valuable for veal.²⁵ In prosperous times the bull calves might have sold for breeding stock, but even so, the market for purebred bulls was limited. Hazard's interest in sex control soon disappeared, mostly because "divine ordination" seemed the only explanation for the ratio between bull and heifer calves.²⁶

The Guernsey breeders determined to sell their cattle to all dairy farmers, not just to a few breeders. In order to impress farmers with the need for purebred bulls, they argued that past inseminations affected the characteristics of calves subsequently born by a cow. Darwin was cited as evidence in an article on "The Effect of a Previous Impregnation on Future Progeny." Thomas Harvey, author of the article, claimed that "the close observing and talented Darwin remarks on this subject: 'Many well authenticated facts have been published, and others have been communicated to me, plainly showing the influence of the first male on the progeny subsequently born by the mother to other males.'"²⁷ If Darwin was right, it profited a man to have a good bull from the start lest he degenerate his herd through niggardliness.²⁸ Breeders may have profited by the argument, but the idea was apparently not very effective since it was not presented in later years. There were better arguments for buying purebred bulls. Recourse to the argument

indicated, however, that breeders were hard pressed to sell their stock.

In contrast to Hazard, both Hoard and Jenkins agreed that the greatest problem in breeding was to get the farmers to accept the single-purpose dairy cow. Jenkins complained in 1885: "There seems to be no idea so hard to eradicate from the mind of farmers and dairymen as the 'general purpose' idea. They want a general purpose cow; one that will give a goodly flow of milk, rich enough to produce a fair quality of butter, and in the end herself convertible into good beef."²⁹ Both Jenkins and Hoard ridiculed the idea. They insisted the search for a dual-purpose cow merely led to the degeneration of cattle.³⁰ As Jenkins saw it, Ayrshire breeders had declined in prosperity because of a devotion to the dual-purpose goal: "It is not long since the Ayrshires, if not in the front rank as a dairy cow, stood among the most popular of all milk producing breeds; today she is hardly spoken of, her breeders in their folly seeking the beefy type of the Shorthorn as a standard of perfection, bred away from the type for which she was designed. Now in the prevailing craze for a general purpose cow other dairy breeds are in imminent peril. Jersey breeders, seek your type in the perfection of milk producing ability...."³¹ While Jenkins issued this warning to Jersey breeders, Hazard, in contrast, declared that the Guernsey was a dual-purpose cow. In 1885 he wrote: "Here we may say that it is deemed high time that the merits of the Guernsey as a dairy breed, and also, as realizing as near as possible, the 'general purpose' breed, were made more generally known."³² Hazard did not press his claim very hard. It was perhaps difficult for him to assert that the Guernsey was a dual-purpose cow at the time that he carried articles entitled: "What Shall We Do With Our Bull Calves?"³³ If the breed were truly general-purpose, the calves could have been sold for veal.

In spite of apparently different attitudes toward general-purpose cattle, Jersey and Guernsey breeders did not often quarrel among themselves. Of course, there was some competition, for as one breeder put it, "the people you want to sell your Guernseys to are the same class as now have Jerseys...."³⁴ The statement revealed breeder objectives, for they were as much interested in winning converts from other breeds as they were in propagating among the farmers. Nevertheless, the editors of the Jersey Bulletin and the Guernsey Breeders' Journal attacked Ayrshire breeders rather than one another.³⁵ The reasons are fairly clear: the

Ayrshire had been introduced quite early, was apparently numerous, and came nearer to being a dual-purpose cow than either Jersey or Guernsey. In retrospect it appears that journalistic attacks on the Ayrshires were unnecessary, but the partisanship of the breed journals indirectly helped to improve the quality of average dairy cattle. The squabbles, however, were among men already convinced of the value of special dairy breeds. The farmers apparently benefited only insofar as the quarrels between breed advocates caused breeders to improve the quality of their stock. Nevertheless, the arguments of the breed journals may also have made some direct impression on the farmers.

While the two breed magazines ridiculed the Ayrshires, Hoard remarked of the Shorthorns:

We have been asking for years—Where are the milking families of Short Horns? Who has such cattle that can be depended on to breed heifers that will make dairy cows with as much certainty of transmission as the Jersey, the Guernsey, the Holstein or the Ayrshire? We have heard in conventions and seen in agricultural papers, the advice given to farmers if they wanted a good dairy cow to get Durhams of milking strains. We know a great many Short Horn cows that are phenomenal milkers, but we do not know of a single breeder in the United States who has a milking family that will breed milkers in a way that will show that the milking strain is the predominating one in their blood.³⁶

The old campaign of the 1830's apparently lingered on in the farm press. Hoard, however, meant to convince farmers they should use dairy cattle. Hoard obviously influenced more farmers than did the breed journals. In the first place, Hoard's Dairyman reached more real farmers; and in the second place, the editor concentrated his attack on the more prevalent scrubs and Shorthorns. The editors of the early nineteenth century had been entirely too effective in propagating the Shorthorn as a special dairy cow; Hoard had to revise their work. Jenkins, Hazard, and Weld all assisted in the general campaign for improved dairy breeds but only indirectly; Hoard reached the farmers.

Editors Urged Home-Grown Feeds

In addition to trying to improve the quality of cattle, the editors also advised on feeding problems. These broke naturally into two parts, what to feed and how much to feed. The

Guernsey breeders discussed the question of what to feed, but their suggested rations were rather expensive. They mentioned oats, cornmeal, and cottonseed meal.³⁷ All were healthful, but the farmer of 1885 could seldom afford such luxuries. Hoard, on the other hand, recommended easily grown feed and told the farmers to plant with a thought for the future. His description of events in 1885 showed clearly that most farmers could not afford any purchased feed, much less cottonseed:

It is one of the most astonishing things in the world to the DAIRYMAN, why sensible farmers are so slow in learning the value of fodder corn as a winter forage.... Last spring, when it become [sic] apparent that in Wisconsin, at least, we were to have a short crop of hay, the DAIRYMAN urgently advised farmers to sow extra ground with fodder corn, and thus make good the deficiency. Not one in a hundred of our readers followed the advice. The result is, hundreds of them are selling their cows and young stock for a mere trifle, because they have not fodder enough to winter them. What is the use of being caught in such a manner and have to buy our wit so dearly? Can't we reason out the road ahead of us, or must we travel every miry, painful step of it like children?³⁸

While Hoard insisted on the need for basic fodder production, Jenkins of the Jersey Bulletin emphasized the quality of the feed. He did not mention many details about feeding. Possibly he did not want to become engaged in controversy with his readers, and perhaps his knowledge of the subject was limited. Instead of suggesting rations, he urged his subscribers to read what the scientists had given in various experiment station reports.³⁹ Later dairy journalists regularly asked professors to write columns on feeding, but this procedure was several years in the future.

For the breed journals, the tendency of breeders to overfeed was more pressing than questions of what to feed. In an effort to sell purebreds, the various breeders had devised tests designed to show the superiority of their particular cattle. These tests involved weighing milk, estimating its butterfat, and noting loss or gain in the weight of the cattle. Next to outright tampering with the results, these tests could most easily be given a favorable turn by overfeeding. If well stuffed, cows could produce great quantities of milk for short periods. The editors believed that cattle were

sometimes killed in the course of these tests. Hazard and Jenkins opposed this policy of overfeeding not only because of bad publicity but also because the tests (under these conditions) were obviously worthless.⁴⁰ A contributor to the Guernsey Breeders' Journal observed: "The testing of cows in this country of late has been more of a speculation than a practical character. It has been a test of the animal's physical powers to see how much forcing and stuffing she would stand without dying, rather than a test showing her relative value as a milk or butter cow. The average farmer cares little about phenomenal records made by high feeding and questionable means, but the question uppermost with him is, how much will she yield in the common dairy with rational treatment? and here is where each and every breed must come finally to be tested and take her stand and value accordingly . . ."⁴¹ The results of the campaign for rational feeding are unknown. The editors did not mention forced feeding in subsequent years, and of course, no breeder would admit that he stuffed his cattle. Probably the editors merely drove the practice under-ground. On the other hand, editorial stress on full feeding (but not stuffing) along with general coverage of nutritional information probably increased the productivity of the average cow.⁴² In this, as in most cases, the influence of the dairy press cannot be easily assessed.

The editors, of course, thought of themselves as teachers and indeed, had little other excuse for being.⁴³ But, unlike teachers, they had no way of testing their students. At the same time, the journalists had to be careful not to leave the impression that they were in fact teaching. One farmer warned the editors in general and Jenkins in particular: "I will make one guess, however, and that is, intelligent farmers will be inclined to drop papers that continually throw at them the accusation of ignorance . . ."⁴⁴ Jenkins accepted the observation and insisted that his periodical was a bulletin board for correspondents and nothing else.⁴⁵ Once he had taken this position, however, he experienced some difficulties with his contributors. He explained: "Anonymous communications cannot be used for publications. The writer may have his real name suppressed, but we must have the name in full to all communications, as evidence of good faith on the part of the correspondence."⁴⁶ Hazard of the Guernsey Breeders' Journal was even more explicit: "There may be times when the modesty of the writer may prevent his caring to reveal his name, but as a rule, where he is

writing, not to use, at least his initials, either fears that his ignorance or his spleen will be manifest."⁴⁷

The editors set standards for correspondents, but the farmers also set standards for the editors. As one "J. A. C." told Jenkins, "The information really useful and that is most needed is not that drawn from learned scientific articles altogether, but from the daily occurrences in the stable seldom noticed at all."⁴⁸ The editors observed this rule as far as possible and, on the whole, carried little obscure scientific material.

The editors felt they had a mission to improve American dairying, but it was a call limited by farmer sensitivity. Even the forceful Hoard tactfully used the words "advise" and "suggest" and spoke of "sensible farmers" being "slow in learning."⁴⁹ Between touchy farmers and warlike editors, one may wonder that either had any use for the other or that the editors accomplished anything at all.

On the whole, the three great journals which appeared in the brief period between 1883 and 1885 approached the subject of dairying from several different viewpoints. Nevertheless, they all reached the same conclusion: the important objective was profitable dairying. Furthermore, this goal was to be reached not only by selective breeding but also by careful adherence to nineteenth century economic theory.

For Jenkins, all the problems of dairying took on a pastoral aspect. The beauty of the Jersey cow had a charm which delighted the editor and influenced his attitudes toward butter making and marketing. As early as 1885 he noted that different men sought different environments and that the type of men determined the kind of cattle, or the reverse:

Every breed of cattle have their own special field; some may excel in the production of beef, others have been developed for the production of milk adapted to the wants of the cheese factory, another class in which the production of butter has been made the ultimatum. It is reasonable, therefore, that each of these specialties should find localities for which their varied qualifications have peculiarly fitted them. Not only locality, but ownership as well, has been classified. The beef producer drifts to the great plains—broad expansive fields where, without the restraints of society, or the necessity for exact and pains-taking manipulation his animals grow, thrive and mature, are shipped to the market, their career ending in the slaughter pens.

The other class by that mysterious law of affinities drift to their several spheres near our populous cities, and in the midst of cultivated fields, and carefully kept woodland pastures, graze in quiet pastoral scenes. Their owners with such surroundings and associations, a cleanliness born of their occupation, delight in their herds, finding profit and pleasure.⁵⁰

The West was forbidding country to Jenkins. He preferred the country near the cities, where there was both "profit and pleasure." He thus indirectly noted the significance of the city and its markets, but the whole picture was stated in terms of pastoral beauty. The market seemed only secondary. Throughout the years of his editorship, Jenkins maintained his sentimental attachment to the Jersey cow.⁵¹

In contrast, the editor of the Guernsey Breeders' Journal did not view the West as inhabited exclusively by slipshod rowdies. As Hazard remarked: "Our western friends should bear in mind the points of the Guernseys as being admirably adapted to them. . . ." ⁵² The editor then listed nine points of superiority of the Guernsey for western farmers. Perhaps the editor was thinking of western Pennsylvania when he mentioned point eight: "Her calves are good sized, make good veal, and are coveted by butchers."⁵³

Unlike Jenkins, Hazard noted the influence of the Industrial Revolution and the growth of cities in purely economic terms. "Increase of population, multiplying industries, scarcity of farm laborers, and resulting higher wages, have compelled a more advanced system of agriculture and a corresponding improvement in live stock. There was a demand for better dairy animals to meet the wants of a vastly increased population."⁵⁴ As Hazard saw it, these mighty changes in society had resulted in the introduction and increased popularity of the Guernsey cow. No pastoral scenes were called into view; the Guernsey was a product of economic necessity.

In contrast, Hoard was less romantic and certainly more explicit than either Jenkins or Hazard. He noted the importance of the city as a market, but he also remarked on the caution necessary when dealing with the evil metropolis. "Fully 90 per cent of all the first class butter made in this [Jefferson] county is sold in Chicago on commission and it is to the credit of the trade that but very little loss is recorded. Our butter makers have learned the value of doing business in the same way as do other well posted business

men, and they have also learned that the wisest prevention against being taken in, is to keep posted."⁵⁵

The economic viewpoints of Jenkins, Hazard and Hoard were slightly different, but they all insisted that high quality was necessary in successfully marketing dairy products. They also agreed that when the price was low farmers should hold their crop and sell when the price was high. Jenkins told his readers that "while trade is so depressed and the money market tight, breeders will serve their interests by withholding."⁵⁶ In the same vein, Hoard demanded increased milk production in the winter, combined with lower production in the summer.⁵⁷ As the editors saw it, the solution to economic problems lay in the direction of better and higher production, accompanied by wise seasonal marketing. They did not propose any form of socialism; neither did they demand government assistance for farmers. Except for Hoard, they did not even speak clearly on the subject of farmer coöperation. Each farmer was an economic entity and was to do his best under those circumstances.

Although there were certain broad areas of agreement between the various editors, there were, of course, many individual peculiarities. The Jersey Bulletin, as its title implied, concentrated on the virtues of Jersey cattle. Most of the paper dealt with sales, offers of sales, dairy records, and pedigrees. On the whole, it contained very little to interest anyone except the Jersey breeder.⁵⁸

The Guernsey Breeders' Journal was a more leisurely gentleman's magazine. Most of the articles were about outstanding herds of cattle, reports of various associations, and lists of transfers, pedigrees, and other strictly Guernsey affairs. Some articles were lifted from foreign publications, and even as early as 1885 there was a column devoted to news from Guernsey.⁵⁹ The death of Victor Hugo, for example, was noted because the poet had done so much to make Guernsey famous. The journal also carried a column on foreign news.⁶⁰ Except for a devotion to the Guernsey, the Breeders' Journal did not differ greatly from the Jersey Bulletin. If Hazard had remained as editor, the journal might well have lasted longer, because he was as energetic as either Hoard or Jenkins.

In its early years, Hoard's Dairyman sometimes carried odds and ends such as the poem "The Druid's Sacrifice," reprinted from the Boston Post.⁶¹ But Hoard usually had more to offer than clipped inspiration. Although all editors emphasized kindness to cattle, Hoard almost made a fetish

of the program. He insisted that the farmer should follow the golden rule in his treatment of cattle: "...treat her as you would like to be treated if you were a cow."⁶² He even recommended a combined milk-pail strainer and milk stool simply on the ground that "if for no other reason that kind of stool would prove a blessing to many a poor cow for the milker could not easily use it to pound the animal with, in order to do him some good if it didn't her. Dairymen who have ill tempered men about them had better adopt this combined stool."⁶³

At the same time that he requested humane treatment of cattle, Hoard also pressed for the adoption of silos. The other editors were silent on this point, but Hoard began the fight early and continued it until his death in 1918. In January, 1886, under the title "What Ensilage Does," Hoard wrote: "Mr. David Burrill, of Little Falls, New York, states that by the aid of ensilage he is now keeping one hundred forty cows on the same land where he formerly kept only forty. There is no increase of capital for land, only a small outlay for the silo and the growing of Southern sweet corn for ensilage purposes."⁶⁴ The tenor of the article suggested that the editor had mentioned the subject before, probably in the dairy column of his Jefferson County Union.

In addition to his campaigns for kind treatment of cattle and the use of silos, Hoard also supported the formation of coöperatives. By the late nineteenth century, few people thought of coöperation as a form of socialism. Rather, it was viewed as a part of the competitive system and as the farmers' answer to the large corporations. Hoard wished the coöperatives well, but he was also aware of their problems. An article which he borrowed from Farm and Home showed considerable foresight. Although the article was not original, only Hoard, of the dairy journalists, thought to run it.

A successful middleman points out that the "inherent weakness" of the co-operative method of butter-making and milk-selling lies in the fact that the farmers composing co-operative associations will not abide by the strict regulations regarding the management of milk.... Becoming offended at such strictness on the part of the manager, at the annual meeting they oust him and put in someone who will be more lenient toward them at the expense of the business.⁶⁵

Hoard commented no further, presumably because the edi-

torial said enough. As subsequent experience indicated, the "successful middleman" was right.

Two Dairy Journals Subsist

By the year 1885, two major dairy journals had been founded. Both were for farmers, although the Jersey Bulletin was intended for a more restricted audience than was Hoard's Dairyman. Significantly, both appeared in established dairy regions. The dairy press did not lead the way, but rather followed at a considerable distance. They were forced to do this because they depended upon subscriptions from dairy farmers. As the experience of other editors indicated, where there were few dairy farmers, there could be no dairy press.

Why just two journals should have endured cannot be answered definitely. Obviously, the papers filled a need, but more importantly, the editors had something to say; something which they thought was terribly important. The failure of the Guernsey Breeders' Journal after Hazard resigned as editor demonstrated the importance of this personal enthusiasm for success of a journal.

Editorial energy subsequently gave rise to a belligerency which became more pronounced as time went on. Between 1883 and 1885, Jenkins disagreed with Hoard on the use of artificial butter color. The disagreement changed to a fight between 1885 and 1910, and antagonism increased between the two as technical innovations appeared. It soon developed that Jenkins opposed anything which did not tend directly to the glory of his Jerseys, while Hoard supported every innovation which might benefit the dairy farmer. The two protagonists often conflicted in opinion on the relative usefulness of various methods.

Chapter 5 - Technical and Trade Journals

1885-1892

Many New Trade Journals Appear

Between 1885 and 1892 seventeen new dairy journals appeared. Of these, eleven were technical or trade magazines. Generally the publications were intended for distributors or manufacturers of dairy products.

In 1885 Amzi Howell began the monthly Milk Reporter at New York. The journal subsequently passed into the hands of John B. Kimber, who sold it to John J. Stanton in 1893. Stanton published and edited the paper from 1893 to 1928.¹ In the course of its life, the journal was published successively at New York (1885-94), Deckertown, N.J., (1895-1901), and Sussex, N.J., (1901-28).² These moves were apparently intended to keep the paper in close touch with the areas of milk production and distribution, for as Stanton pointed out in retrospect "the great bulk of New York's milk supply was produced in Orange and Sussex counties, and the great distributors then in the business were natives or residents of these countries, or men who purchased their supplies principally in the two counties."³

This first paper for milk distributors was followed by the Michigan Dairyman, a monthly journal for cheesemakers, begun by E. A. Stowe at Grand Rapids, Michigan, in 1886. In 1891 the journal appeared as the American Cheesemaker and some time between 1886 and 1891 was taken over by the Tradesman Company, although Stowe remained as editor until the journal died. The American Cheesemaker described itself as "a monthly Journal devoted to Cheesemakers everywhere."⁴ The journal ceased publication sometime in 1917 or 1918.⁵

In 1888 James Slocum began the American Creamery at Holly, Michigan, and in 1891 E. I. Burridge, an experienced creameryman, was appointed assistant editor.⁶ The paper

cost one dollar a year, was published on the first and fifteenth of the month, and proclaimed on its masthead that it was "Devoted to the interests of the Creameries of America."⁷ In April, 1892, the paper moved to Chicago because of the more central location. In June, 1892, Slocum retired, selling the paper to Burrige. In August, 1892, the American Creamery became a monthly and in 1896 was consolidated with the New York Butter Trade.⁸

Interest in creameries appeared even farther west when Fred L. Kimball began his monthly Creamery Journal at Waterloo, Iowa, in 1890. Apparently Iowa was ready for a journal "Devoted to the Creamery Interests of the North-West," for in the words of a contemporary: "in the history of journalism we believe the success of this paper is phenomenal. Advertisers patronized it from the start, and the creamery boys all like it."⁹ In 1892 the editor informed his readers that "we have religiously adhered to our rule to make this an exclusive creamery paper, and we have, of course, solicited only subscriptions of those engaged directly in the creamery business. We doubt if there is a list anywhere on earth, so complete and so accurate, of the creamerymen of the United States."¹⁰ Kimball died in 1904, but the paper continued publication until 1950, when it was consolidated with the Dairy Record of St. Paul.¹¹

From 1866 to about 1900, dairy editors made charges and countercharges that the merchants in some city or other were attempting to dominate the dairy produce market. One of the groups most persistently attacked was the Elgin Board of Trade, which actually did determine the price of butter in the Chicago market and, insofar as possible, in other cities as well.¹² In 1891 the Elgin Dairy Report was established by D. W. Willson. The journal was sent out every Monday after the close of business of the Board of Trade and carried the latest market reports from Elgin.¹³ The Dairy Report presumably performed this function as a service to creamerymen and merchants, although it was charged that by publishing the prices at Elgin the journal also increased the influence of the Elgin Board of Trade in other cities. Editorial complaints of the activities of the Dairy Report appeared as late as 1913. The journal ceased publication around 1922.¹⁴

In 1891 E. D. Wilcox and E. Madrigan began the Creamery and Dairy at Clarksville, Iowa. The paper appeared monthly and cost fifty cents a year. Apparently the journal attempted to serve both the creamery and the farm dairy,

with Wilcox conducting the creamery department and E. C. Bennett editing the dairy section. In 1892 the paper was moved to Waterloo, Iowa, where it was either absorbed by some later journal or ceased publication some time between 1892 and 1898. The hybrid journal probably had no great influence on either farmers or creamerymen and just barely left a record of its existence. In 1892 the Creamery Messenger appeared as a monthly at Columbus, Nebraska. It ceased publication in 1893.¹⁵

With the exception of the Creamery Messenger, each of these technical journals appeared within the dairy trade sphere of some metropolis. The Milk Reporter was situated very close to the New York market; the American Cheesemaker was located on the edge of the Chicago dairy area; the three succeeding creamery journals were found well within the butter market regions of Chicago. The kind of dairy or farm periodical which appeared in any place was largely determined by the type of dairying practiced in the immediate region. Once in a while there was an exception to the rule, and a dairy journal began in some unlikely place; but such publications seldom lasted more than a year or two. Editors had the best chance for success when they received strong local support; advertising followed circulation; no paper of the wilderness had a long life, and none sprang into national prominence overnight.

The Dairy Column, founded in 1888, afforded one of the clearest examples of failure which resulted from attempting to introduce a journal into a region where dairying was not already prominent. The Dairy Column was the first boiler plate in the history of dairy journalism. As J. H. Monrad explained: "In 1888 an attempt was made by the 'Bureau of Dairy Information,' Chicago, to spread dairy knowledge by sending to local county papers a weekly sheet with original articles by Prof. Henry, John Gould, Gabrielson, Monrad, etc., and a few clippings. In return the 'Bureau' took advertising space in said papers. The scheme was given up, and the Dairy Column is now published at 60 North Clinton St., Chicago, as a weekly. It gives the market reports."¹⁶ The arrangement described by Monrad was almost bound to fail. Boiler plate consisted of sheets of paper which were printed on one side with various articles and advertisements and were sold to country editors. The editors then printed his local news, editorials, and advertisements on the blank side of the sheet, folded the paper, and thus had a complete newspaper. The advantages of the system were that the local

editor reduced his typesetting costs by half and also secured items of more than local interest. The disadvantages were that he did not receive the revenue from the advertisements carried on the inside, and occasionally a news item or editorial in the boiler plate did not fit his particular editorial program. In the type of boiler plate which Monrad attempted to sell, editors in dairy regions lost the advertising of the firms represented by Monrad, such as the various separator manufacturers. In nondairy regions, the editors were not interested in carrying two full pages of dairy material.

With the exception of some breed journals, the journals founded for dairy farmers between 1885 and 1892 were short lived. The Dairy and Farm, a monthly, established in 1886 at Algona, Iowa, died by 1887.¹⁷ The Guernsey Breeder and Milk Journal appeared as a monthly in New York only from 1886 to 1887.¹⁸

The first of the relatively long-lasting journals was the Holstein-Friesian Register, begun in 1886. The breed journals, because of their specialized nature, did not have to cater to local audiences alone. Nevertheless, the Holstein-Friesian Register apparently changed place of publication in an effort to find local support. The journal began at Terre Haute, Indiana, but two years later moved to Brattleboro, Vermont, where it remained until it was absorbed by the Holstein-Friesian World in 1928. For a brief period in 1892 and 1893, it was located at Boston, but this experimental move did not prove successful. The journal appeared semi-monthly, cost \$1.50 a year, and was intended primarily for breeders.¹⁹ Nevertheless, in 1889 the editor, Fredrick L. Houghton, proudly announced that "the influence the Register has exerted upon the public is manifest in the general requests from prominent public teachers and students of dairy matters for files of the paper."²⁰

The Holstein-Friesian Register was followed by two transient breed journals. The weekly American Shorthorn Gazette, published at Indianapolis, began in 1887 and ended by 1889.²¹ In the latter year, the Bulletin of the American Devon Cattle Club probably began as a monthly at Wheeling, West Virginia. It ceased publication in 1893, although it is possible that the journal actually appeared only in that year.²²

Journals Follow Dairying Westward

Iowa produced an especially large number of dairy journals between 1885 and 1895. In addition to the Creamery

Journal already mentioned, two new dairy papers appeared before 1892. Sometime in the 1890's, Henry C. Wallace began the Farm and Dairy at Ames, Iowa. In 1895 the title was changed to Wallace's Farmer and Dairyman, and in 1898 the journal continued simply as Wallace's Farmer. During the early years of its life, Farm and Dairy was devoted to promoting the State Agricultural College rather than dairying.²³ In 1895 Henry Wallace, Sr., was added to the staff and apparently gave the paper an antimonopoly tendency.²⁴ Farm and Dairy offers one of the few examples in which a dairy paper was the lineal predecessor of a general farm journal.

In 1892 E. T. Runion and R. S. McKee joined in publishing and editing the Dairy Journal, of New Hampton, Iowa.²⁵ Only a few numbers of this monthly were issued. The journal was one of several which appeared from time to time in northeastern Iowa.²⁶

J. H. Monrad (who had made the first attempt at dairy boiler plate in 1888) tried a new experiment in 1890 when he began the Dairy Messenger of Chicago.²⁷ The paper, half farm and half technical journal, was apparently designed to reach all segments of the industry. The journal hinted that some of the agrarian dislike of the period was directed at creamerymen, as well as other dairy middlemen. As Monrad explained:

THE DAIRY MESSENGER will be published once a year only, and will be published in "German" and perhaps also in Danish and French, if sufficient subscriptions are received for them. The idea being that creamerymen and cheese factorymen, as well as farmers' clubs, should order a certain number of copies. And while we feel that we may have "bitten off more than we can chew," we shall be satisfied if, by this publication, the creamerymen and the patrons may come just one inch nearer each other. We shall be satisfied if we succeed in removing only one little roughness on the road between the farm and the factory.²⁸

In January, 1892, the Dairy Messenger changed to a quarterly and carried, among other things, "a review of the discussions in the dairy papers all over the world."²⁹ The editor intended to make the journal into "a complete handbook for dairymen as well as a true historical record of the thoughts and events in the dairy field."³⁰ Monrad was one of the very few journalists who had a sense of the importance

of history, although he was not a very careful scholar.³¹ The Dairy Messenger sold for fifty cents a year and ceased publication in 1894.³²

The National Dairyman, first published at Kansas City, Missouri, in 1892 and was also something of a misfit. Like the Dairy Messenger, it sought to serve both the farmers and the creamerymen. Significantly enough, the two journals merged in 1894.³³ In its initial number, the publishers, John E. Spencer and L. N. Barrick, announced that the journal was "launched upon the tempestuous sea of technical journalism."³⁴ However rough the sea, the contents of the journal did not fully support the claim of technical journalism, since more than half the articles were devoted to problems of dairy farming. The paper appeared monthly at a rate of fifty cents per year and ceased publication some time in 1896.³⁵

Of the older journals, only Hoard's Dairyman and the Jersey Bulletin were of any great importance between 1885 and 1892. Hoard's began the publication of an index in the early nineties, and the Jersey Bulletin reduced its subscription price to two dollars a year. Otherwise, the business of these two remained much the same.³⁶

Agrarian Unrest Affects Journals

The agrarian unrest which occurred between 1866 and 1896 influenced the development of the dairy press. During this period agricultural prices declined, with precipitous drops in 1866 and 1873.³⁷ The editors took advantage of these depressions to advocate dairying as a means of prosperity. But however much the editorial advice was adopted, some farmers were determined to take more direct action. The Patrons of Husbandry, or the Grangers, evolved from this distress and early turned to political action to secure laws to control the railroads. In many cases the railroads were indeed greedy. Furthermore, during depressions transportation costs were particularly important to agriculture, since freight rates were often the margin between profit and loss. The farmers west of the Mississippi had especial grievances, since railroad rates were always higher in areas where there was no competing water transportation. In several states the Grangers obtained laws to control railroad rates, but adverse court decisions soon indicated that interstate transportation had to be regulated by the federal government. By 1876 the Grangers had declined in influence.

Shortly after the Panic of 1873, the Greenback movement

began. The Greenbackers were interested in railroad control, but more importantly they demanded monetary changes in order to secure agricultural prosperity. They wanted the federal government to issue more paper dollars and thus relieve impoverished farmers, who could then pay old debts with inflated currency. The Greenback movement was shortly influenced by the silver interests of the West, who proposed that instead of issuing paper money the country should return to bimetallism and the free coinage of silver. Since silver was far below gold in value, its coinage at the ratio of 16 to 1 would bring inflation as surely as an expansion of paper money. The Greenbackers took up this demand and in 1878 secured the passage of the Bland-Allison or Silver Purchase Act. With this victory, the Greenbackers faded away, but the farmers were no more prosperous and no more contented than formerly.³⁸ During the momentous Granger and Greenbacker movements, the dairy press was in its infancy and apparently kept clear of political disputes. Editors merely stressed more efficient production and advised farmers to shift to dairying. The decline in agricultural prices continued, however, and by 1885 proved almost unbearable to many farmers, who once again began to organize for political action.

The low agricultural prices between 1885 and 1892 disturbed the dairy journalists. Nevertheless, they did not actively support or oppose the current farmer movements. Instead the editors concentrated on increased production and greater efficiency, for as Hoard declared in 1889: "One reason why there is so much truth in the oft-reiterated remark, —'Farming don't pay,' —is that there is not another business on the face of the earth that, in proportion to the number engaged in it, supports so many incompetents. Mother Earth is kind, and gives a so-called farmer a living, even if he exercises little more brain than it takes to run the business of an Indian."³⁹ Perhaps Hoard was right, but a great many farmers felt that the trouble lay in the economic system. Consequently, the break in prices in 1885 and 1886 led to the rapid growth of farmers' clubs, which were united into various regional alliances by 1887. By 1892 the alliances had formed the Populist Party and were demanding free silver, parcel post, direct election of senators, government ownership of railroads, and a host of other reforms. Before 1896, however, the dairy editors remained silent on these questions.

While the farmers moved in the direction of political

action, there were also increased efforts to establish dairying in various sections of the West. The growing number of farm-dairy publications indicated that some western farmers were shifting away from grain and beef farming. Dairying, experience showed, resisted depressions better than general farming, and the new editors stressed the fact.

Meanwhile, the period from 1866 to 1892 was the great era of the "robber barons," of trusts and monopolies. Jay Gould and Jim Fisk manipulated the stock of the Erie Railroad during the sixties and seventies; in 1865 John D. Rockefeller entered the oil refining business of the nation. In 1887 the Distillers and Cattle Feeders' Trust was formed, followed in the same year by the Sugar Trust. Thus food processing also entered the era of trusts. The period was one of aggressive capitalism when entrepreneurs "combined foresight, boldness, courage, driving force, and executive ability with greed, avarice, cruelty, trickery and ruthlessness."⁴⁰

The general expansion of dairying, even in times of agricultural distress, gave rise to a great number of creameries and cheese factories scattered throughout the land, while the large cities fairly teemed with middlemen, commission agents, and warehousemen. Life was especially hazardous in the business jungles. Consequently, specialized journals appeared to impose some sort of discipline on the members of the dairy industry. These journals informed their readers of technical advances, relayed market reports, and just as importantly, exposed frauds.

From the very beginning there were some differences between journals intended for farmers and those intended for manufacturers or merchants. The farmer journals aimed at high prices for farm products and from time to time mirrored farmer distrust of cheesemakers, commission men, retailers, separator salesmen, and middlemen in general. On the other hand, technical journals approached the farmers as though they were quite capable of being excessively obstinate, but their good will had to be maintained. At the same time, these editors felt impelled to tell producers to keep quality high and not complain about prices or wages. Outright editorial denunciation of producers, distributors, or processors was unusual, however.

Editorial Disagreements Given Emphasis

The conflicts within the dairy industry appeared to be less violent than those between publishers. Journalistic quarrels

may have resulted from that prophetic inspiration which directed most editors. After a journal had become prominent, it was less prone to attack its contemporaries. The early editors did not act as though they thought that mention of a rival merely gave him free advertising. On the contrary, they apparently believed they built circulation by loudly denouncing by name every competitor in the field. At the same time, there was some mutual admiration, especially between noncompetitive journals. Editorial mention of other papers took several forms and was inspired by various motives. Occasionally an editor believed that anything which promoted the reading of dairy literature would also increase his own subscription list, although his public statement might appear more altruistic. As J. H. Monrad put it: "We have to thank the 'Bureau of Dairy Information,' for most of the articles used here, and take this opportunity to urge the factorymen and patrons to induce their local papers to subscribe to the Dairy Column, thus reaching a class of readers who seldom subscribe to agricultural papers, and much less to specific dairy papers; and we believe that this may give them a taste for more extensive reading in dairy papers, notably Hoard's Dairyman, Dairy World, etc."⁴¹ No matter what the motive in mentioning other journals, those editors who did so left valuable records of papers which have otherwise vanished. Even if the editor was not of historical bent, he sometimes unwittingly added something to the historical record.⁴² Furthermore, editors who were otherwise disinterested in history sometimes noted the origin and development of their own journal, as D. H. Jenkins did in 1892.⁴³

Kimball of the Creamery Journal was particularly prone to boosting obscure publications, possibly on the ground that he thereby gained friends in the cities mentioned, while he lost nothing in circulation. He mentioned the New Dairy of New York, the Elgin Dairy Report, and the Dairy Messenger.⁴⁴ He also supported a passing periodical which was so obscure that all other record of it has vanished: "We are in receipt of the first copy of the Anti-Oleo News, published in Philadelphia by the Dairymen's National Protective association. It is a very handsome little paper, and contains much valuable information concerning oleomargarine, and the detailed proceedings of that association in its work against the spurious article. It will certainly be of material help to that association, and friends of pure butter should send a dollar and get it for a year the fifteenth of each month."⁴⁵

As would be expected, the fire flashed most when rival

publications commented on one another. The American Creamery of Holly, Michigan, goaded Kimball severely on several occasions. In one instance Kimball replied in kind: "An alleged creamery paper, published at Holly, Michigan, recently made a most uncalled for and scurrilous attack on THE CREAMERY JOURNAL and its editor, devoting two or three columns of its valuable (?) space to us, and inviting us to make reply to its abusive remarks. THE CREAMERY JOURNAL has neither the space nor the inclination to comply with the request."⁴⁶ On the other hand, the activities of the Creamery Journal were not always above reproach. As the editor of the National Dairyman complained: "Mr. Thos. P. Cookson, of Kansas City, one of the best machinists and writers on mechanics in the West, also inventor of the new rapid locomotive, wrote a very fine article for THE NATIONAL DAIRYMAN some months ago. The Creamery Journal, of Waterloo, for August coolly 'collars' the entire matter and gives no one any credit. Is that justice to a painstaking writer?"⁴⁷

Of the several editors, none was more occupied with inter-publication squabbles than W. D. Hoard. The Holstein-Friesian Register asserted that Hoard was pro-Jersey, while the Jersey Bulletin maintained that he was merely pro-Hoard.⁴⁸ The Holstein-Friesian Register was particularly aggrieved because Hoard refused to believe the records set by various Holstein cattle. As the Register complained:

Hoard's discourteous comments upon the record of Pieterje 2nd and her owner, Mr. Dallas B. Whipple, which the Register declines to take notice of specially, because of their outrageous imputations upon Mr. Whipple's veracity and motives, are fittingly answered in another column by Mr. Drew, a neighbor of Mr. Whipple's and a Jersey breeder.....

.....
An apology is due to Mr. Whipple from this choleric dairyman-governor-editor, who has allowed his prejudices to make a humiliating exhibition of himself before the Holstein world.⁴⁹

D. H. Jenkins and W. D. Hoard also expressed uncompimentary opinions of one another. Jenkins asserted that Hoard lacked moral stature, and Hoard accused Jenkins of lacking a sense of humor:

The Jersey Bulletin of June 15th cuts out a part of a

facetious letter written by Mr. Martin, of Michigan, to the DAIRYMAN of April 1, and proclaims it as "a logical result" of our teaching. Well we guess it is. We have always advocated the circulation of a good joke, and in this state they have been known to lynch a man who could not see the point of one. It would go hard with the editor of the Bulletin up here, however, for he is blind enough not to see it, and dishonest enough to garble it and quote it for something else. As the old Hoozier said about the dying horse, "His eyes is sot."⁵⁰

The editors were, of course, concerned with more than other journalists. Their range of interests was remarkably wide, although the older magazines, Hoard's Dairyman and the Jersey Bulletin, offered a greater variety in subject matter than did the newer journals.

Interest in education centered on reporting news on dairy schools and analyzing the principles of dairy instruction. Nearly every journal carried something on the subject.⁵¹ Interest in labor problems was not often evident, although the National Dairyman reprinted an article from the Christian Union on the Homestead strike of 1892. The editor, John E. Spencer, suggested that the article by a steel executive would "undoubtedly do much toward enlightening many upon a question that has threatened widespread disaster to great manufacturing industries and untold loss to the laboring classes."⁵² At the same time, antimonopoly agitation and farmer coöperation absorbed part of the energies of a few editors, while an occasional bit of foreign news, generally not pertinent to dairying, made its way into other journals.⁵³ Most of the journals carried book reviews which were invariably explanations of the subject matter, rather than interpretations of content.⁵⁴ On occasion the journals carried articles on the history of dairying, generally in the form of reminiscences by old farmers.⁵⁵

On the whole, there was no great division between technical and farm journals in the range of subject matter, but it is perhaps worth noting that the technical papers carried more light verse. The farmers, apparently, did not appreciate such frivolous lines as:

Butter, butter, you look fair,
But I wonder what you are —
Are you really what you seem?
Are you made of grease or cream?⁵⁶

On the other hand, perhaps the farmers' taste in poetry was of a higher level.

The farmer magazines, unlike the technical journals, were especially interested in the treatment of cattle. Hoard and others stressed the need for warm stables and full feeding in the winter, for as Monrad of the Dairy Messenger remarked:⁵⁷ "When a farmer (?) makes warm kennels for three or four dogs and leaves his calves out in the storm to get 'hardy,' the chances are he will never astonish the world much as a successful dairyman."⁵⁸ Obviously, the subject of cattle treatment remained about where it had been in 1840. The significant point was that the editors felt the campaign still had to be continued.

New Interest Taken in Breed Improvement

Editors continued to be interested in breed improvement. In 1886, Hoard charged that most of the farmers of the United States didn't know what a cow was for. "They really have no clear understanding of a dairy cow,—of what she is, how she is bred or what she is for. They have lived with cows all their lives, only to know less about them than they do about dogs, for not one but knows better than to hunt prairie chickens with a bull dog. Yet they will persistently drive along, year after year, trying to make money at dairying with beef animals...."⁵⁹ He bluntly informed the farmers that they would have to abandon the general-purpose nonsense and buy dairy breeds. Opposition to Hoard sometimes came from unusual sources. In 1889, for example, the Holstein-Friesian Register reprinted a letter from one A. K. Luther who complained that "it is a favorite theme with the majority of our writers to decant on the merits of specialty farming, and the general-purpose farmer who grows his grain, makes some butter and finishes off a few steers or hogs each year, is each week rapped over the head unmercifully by somebody."⁶⁰ The Holstein-Friesian Register could sympathize with Luther, especially since he owned a Holstein. The editor clearly indicated that he thought the Holstein a splendid beef animal and at the same time the best dairy cow available.⁶¹ He was contradicted by the Jersey breeders who asserted that the Jersey was driving natives, Shorthorns, Ayrshires, and Holsteins out of the dairies.⁶² The small amount of rich milk supplied by the Jersey in comparison to the Holstein was presented as one of the Jersey virtues, since it took less labor to handle the milk.⁶³

Special dairy breeds and their disputes were generally beyond the interest of farmers who usually employed what Hoard called "succotash breeding." Nevertheless, quarrels between breed enthusiasts did serve to keep the subject of breeding before the journalists and the public. Some farm papers pressed for breeding to dairy type regardless of the purebred strains involved, while others suggested that purebred bulls be used to grade up the herd. In either case, it was necessary to test the yields of the various cattle in order to know which were the best producers.⁶⁴ Testing involved weighing the amount of milk a cow gave over a period of time, judging the amount of butterfat in the milk, determining the amount of feed used by the cow to produce the milk, and sometimes, noting the amount of live weight of the cow before and after the test. By comparing tests for the several cows in a herd, it was relatively easy to tell which cattle produced more and also to identify any that were not paying for their feed. The editorial campaign for cattle testing is still in progress. Apparently there was little change in the attitudes of farmers in spite of fifty years of editorial pressure.⁶⁵ The average farmer seemed to believe he knew a good cow when he saw one without fancy or expensive testing.

The private or nonauthenticated testing of cattle to demonstrate superiority of breeds was questioned soon after it started. Neither farmers nor editors were inclined to believe some of the records set at the time. As a result, the breed organizations turned to public testing and contests at fairs where there were reliable witnesses. In 1887 the Jersey breeders were discomfited by the results of the New York Dairy Show where a Holstein won the butter prize, but the Jersey Bulletin had a ready explanation. The Jerseys at the show had been inferior.⁶⁶ By 1890, the usefulness of public tests was questioned. The Breeder's Gazette called the system a farce and demanded its abolition.⁶⁷ The Holstein breeders were apparently still successful at public tests, for the editor of the Holstein-Friesian Register wrote of them: "What position on this subject shall we as Holstein-Friesian breeders take? We never opposed such testing. We never strongly advocated it. In entering our cattle for such testing, we have simply acted in obedience to an almost universal demand. In such testing our cattle have not disappointed us. We have not come out second best. Hence, so far as the reputation of our breed is concerned, we have no reason to ask for the discontinuance of such testing. Let

those who have failed advocate its abolition.”⁶⁸ If Houghton of the Register expected an immediate capitulation from Jenkins he was disappointed. In 1891 plans were being formed for a gigantic test of breeds at the Columbian Exposition of 1892-93. The Jersey breeders carefully prepared their entry into the contest, and talk of dropping public tests ended for the moment.⁶⁹

The subject of feeding naturally accompanied that of breeding. Unlike breeding, however, feeding interested the technical as well as the farmer journals. Creamerymen, for example, were told to advise their patrons what to raise for feed.⁷⁰ Many other related subjects were covered by the various periodicals: calf feeding, details of rations, winter feeding, and the use of ensilage.⁷¹ Articles on ensilage usually carried precise descriptions of the feeds to be included and how they were to be prepared. Soiling also attracted some attention. All of these subjects were then made to relate feeding to the quantity and quality of milk, often with the support of scientific experiments.⁷² The sum of editorial opinion was best expressed by Hoard when he wrote in 1886:

Half starving a cow through seven months of the year, on dry food, and consuming the product of about two acres of poor meadow, and some straw to do it, to get a cow-frame out on to about an acre and a half of pasture that will be “brown and bare” ere the moon fulls in August, and then let her out upon meadows to half spoil them,—do all this for the purpose of making them make from ten to fifteen cent butter, and raise a calf, to keep up the ghastly procession of bones, is the majority’s way of attempting to make money in the dairy business. Its outcome is a record of about 100 pounds of such butter per annum, and a calf the picture of its parents—and their owner.⁷³

Future farm editors were to write on feeding again, but seldom with any more vigor.

Technical Journals Slanted to Creamerymen

While the farm periodicals specialized in breeding and feeding, the technical journals carried advice and news for the particular trades they represented. In the period 1885 to 1892 most of the technical magazines were intended for creamerymen. A consideration of these journals will adequately show the type of material contained in other technical journals.

The creamery journals carried special articles dealing with conventions, the results of the meetings, the papers read, and the persons who attended. This type of news always ranked first in the several journals, was always fully covered, and generally took up a larger proportion of each paper than any other single item or group of items. When there were no conventions, the journal carried news on various creameries, plus the latest information on the several state, regional, and national dairy organizations.⁷⁴ These services tended to keep the industry unified and made more effective the various programs for better quality butter or for the restriction of oleomargarine.

The creamery journals consistently carried exhortations for higher quality butter, coupled with advice on how to achieve this goal.⁷⁵ The editor of the "Creamery Hints" column of the Creamery Journal even offered to come and demonstrate any process he had advocated, provided such demonstrations "would not interfere with his other business"⁷⁶ Apparently this personal attention of the editor was necessary. In 1891 the Creamery Journal noted that entries in the Iowa butter contest were exceptionally poor. "There were nineteen entries, twelve of creamery butter and seven of dairy butter. Not one package of the whole scored eighty-five points. The average of the creamery butter was seventy-seven and of the dairy butter was seventy-five."⁷⁷ There was clearly room for improvement, and the editor meant to have it.

Another subject of special interest to the creamery journals was the problem of creamery fires. These were common throughout the nineteenth and early twentieth centuries, when steam boilers and wooden buildings increased the hazard of fire. The results of fire were varied and often serious. As the editor of the American Creamery observed:

We may speculate on the origin of these mysterious fires as much as we like, yet they continue to occur in rapid order. The direct result is felt by every man in the business, through increased rates of insurance, and the absolute refusal of many of the so-called "old line" companies to accept them as risks. It is annoying to a creameryman when he asks his insurance factor to write a risk on his creamery to be told by him that his company prohibits this writing, when he very well knows that they should be a favored class.

The results of these fires are in many cases, a heavy

and permanent loss to the communities in which they occur. The starting of a creamery and the building of a business is not the work of a few days, of a few months, but requires years of constant application, how natural then, should the creamery burn during this discouraging period that it should never be rebuilt and the community suffer imparable loss.⁷⁸

The editor did not make an especial plea for fire prevention. Perhaps there was even a hint that the fires were started out of malice or madness. The destruction of creameries by fire was, however, no minor matter, and later editors were to return to the subject with more concrete proposals for prevention.

Babcock Test Faces Heavy Opposition

No development in the dairy industry caused such a stir as the invention of the butterfat test by S. M. Babcock in 1890. Shortly after this invention was announced, the creamery journals advised the creamerymen to buy their cream according to the test. There was some farmer resistance to the plan, but generally they supported it, while the creamerymen opposed the idea. Eventually the creameries did buy milk according to fat test.⁷⁹ Editorial pressure probably had something to do with this change. Certainly the editors began the program early enough, since the test was put on the market in 1891, and by April of that year the Creamery Journal carried an editorial on the subject.⁸⁰

Interest in the fat test was not restricted to creamery journals. In August the New Dairy noted that the farmers of Chittenden county, Vermont, demanded payment for milk according to a test of its butterfat content.⁸¹ The editors of the Creamery Journal and the New Dairy both considered it foolish for creamerymen to resist the demand.⁸² On the other hand, the immediate reactions of the Holstein-Friesian Register and the American Dairyman were not altogether favorable. As the American Dairyman saw the question: "If these advocates of the oil test and the churn do not stop proving to the outside world how utterly unreliable both these tests are, there is great danger that the dairymen will throw both of them up in disgust, and go out of such an unreliable business. Either one of these machines would send a man to jail quicker than stealing a horse, provided they caught the cow or the cream on the wrong day, or the wrong end of a single day."⁸³ D. H. Jenkins attacked both S. M.

Babcock and his test. The American Creamery promptly took up the cause of Babcock.

In a late issue of the Jersey Bulletin, Dr. Babcock is held up to ridicule and pictured as occupying an easy chair at Madison and laughing over the amount of free advertising that his acid test is receiving. The natural inference that one would draw would be that Dr. Babcock was pecuniarily interested in his test. When the fact is that he gave the results of years of study to the world at large, and that everyone who wishes can manufacture Babcock testing apparatus.

Dr. Babcock, further, is not reclining in easy chairs, but is today as hard a worked man as there is in the state of Wisconsin, and if the Jersey Bulletin wishes to establish a reputation for fairness, they will not we trust allow such insinuations to creep into their columns.⁸⁴

Jenkins was obviously caught off base, but rather than withdraw his statement, he attempted to change the subject by republishing an editorial from the American Dairyman:

Some of our contemporaries editorially and by correspondents, are trying to have a lot of fun at the expense of THE JERSEY BULLETIN, for remarking upon the satisfaction with which Dr. Babcock must contemplate the immense amount of free advertising he is getting on account of the oil testing machine he invented. It strikes us that the aforesaid contemporaries are carrying this joke a little too far. There are more ways than one for a man to profit by such free advertising, and he would be more than human not to enjoy the results. So far as the patent is concerned, we respect the professor for not applying for one, not that he is morally entitled to one, but because he did not do as others frequently do—take advantage of his opportunity for pecuniary gain.⁸⁵

In spite of this plea for charity toward the Jersey Bulletin, Hoard's Dairyman took a parting shot at Jenkins by commenting on "his capacity to crawl out of a gimlet hole."⁸⁶ In subsequent editions Jenkins attacked the Babcock test, but he left the inventor alone.⁸⁷ The Jersey Bulletin complained that "when rightly handled, the churn always gets more pounds of butter than there are pounds of fat in the milk as given in the analysis."⁸⁸ The Bulletin also asserted that the market value of butter depended on flavor, aroma, and tex-

ture, and that the Babcock test could not test these qualities.⁸⁹ Hoard admitted that this was so, but nonetheless he pointed out that "it is by no means the least of the many benefits resulting from the use of the Babcock test that it has brought separators, gravity creamers, churns and butter and cheese-makers to book and required them to account for the material placed in their hands for manipulation."⁹⁰ Jenkins possibly opposed the butterfat test because it tended to destroy the Jersey breeders' claims of having cows that produced milk with 80 per cent butterfat.⁹¹

In 1892, at about the same time that the controversy over the Babcock test was raging, the Jersey Bulletin undertook the support of homemade butter. The explanation offered by Jenkins was interesting: "The Jersey Bulletin has had more to say in behalf of the private dairy interest than any other paper, it is true, but this has not been solely because the great bulk of Jersey cows are in private dairies, but more because we recognize it as by far the largest, most widely distributed and most important of all dairy interests."⁹² The editor then went on to disclaim any intention of attacking the creameries, although he observed that most of them were filthy. The editor also insisted that private dairies produced better quality butter and received higher prices for it.⁹³

In contrast, the National Dairyman carried an article by one professor James McAdams who asserted: "No man who respects his wife will overwork her with churning and packing butter, and then cart it to town, and trade it for two pounds of axle grease. Better keep it at home and grease your wagon with it."⁹⁴ Jenkins' claim that farm butter received higher prices did not stand up. The Dairy World challenged the proposition with the observation that "we object to his [the farmer's] talking of the high prices he gets for his butter, by private sales, without calculating the cost of making and marketing, which in many cases are three or four times as much as that of the creamery!"⁹⁵ Hoard went a step further and asserted that the highest priced butter in the world came from the Elgin district and that all of it was creamery made.⁹⁶ The disputes between creamery and farm dairy raged for a time, but eventually the advocates of home butter making lost the battle, primarily because the creamery had the advantage of machinery, carefully trained butter makers, marketing outlets, and economies of large-scale production. Furthermore, the creameries seemed to produce a better grade of butter than the

harried farmer's wife. In addition, the women undoubtedly had something to say on the subject.

The generally poor quality of butter, both creamery and farm produced, led almost directly to increased sales of oleomargarine. All dairy editors joined the fight against the substitute.⁹⁷ In 1887 Jenkins told the sad story of what had happened to a careful butter maker:

A manufacturer of prime Jersey butter not long since consigned a sample lot of it—fragrant, yellow, sweet—to a Pittsburgh commission merchant of reputation and character. In due time the consignor received a return of just six cents per pound with the explanation: "The commission dealer presented the butter to his customers with his strongest recommendation. But not one of them would believe it to be genuine butter. 'Why,' said they, 'that is altogether too nice. None but butterine men put up butter like that. We've handled too much country butter to be taken in that way.'" This true story is most significant. It means (1) that buyers in general are unaccustomed to finding their butter put up in attractive form; and (2) that butterine manufacturers have a reputation for handling clean and showy goods. This is hardly a pleasant subject for contemplation, but before we drop it we want to say that if buttermakers had put up their products all along as they should have done the markets would not have fallen an easy prey to artificial substitutes.⁹⁸

The package for oleomargarine, or what one editor preferred to call "the sepulchre," was obviously important.⁹⁹ The editors did what they could to make butter makers present their goods attractively, but the continued pressure was not completely successful until after World War II.

Editorial attacks on oleomargarine ranged from gleeful reports of falling sales to stories about merchants who were defrauded by buying oleomargarine for butter.¹⁰⁰ The journalists constantly insisted that there should be laws to prevent the manufacture and sale of the product, and enforced their pleas with horrifying details of its contents. In the era of the meat-packing giants, the charges might have been true. As one writer saw it:

All bogus butter is unwholesome, if not absolutely poisonous. Why do they deodorize the raw lard and tallow with sulphuric and nitric acid or caustic soda? To disguise the obnoxious stench, not to remove it, as that

is beyond the knowledge of the precious rascals making the bogus butter; you deodorize water-closets for the same reason, and by similar means. If you are an oleomargarine or bogus butter eater your doctor must not prescribe calomel for you; bogus butter converts calomel into corrosive sublimate, a deadly poison, causing Bright's disease, diabetes, and stomach and bowel troubles.¹⁰¹

This interest in the public welfare was one of the more altruistic approaches of the editors, although Hoard made his appeal directly to the farmers on the grounds of economics, as did the National Dairyman.¹⁰² If the campaign accomplished nothing else, it forced the oleomargarine manufacturers to improve their product, although some time passed before vegetable oils replaced lard. Food and drug inspection was also probably furthered by the complaints of the dairy industry about oleomargarine. At the same time, the journalists gradually gathered enough support to demand and finally obtain punitive legislation, both nationally and locally. The sum result was a breathing spell for butter and a false sense of security for the dairy industry.

The competition of oleomargarine was once again balanced by technological advances. The discovery of lactic sugar and its use as medicine interested the editors because it offered another market for milk, and the first commercially successful means for making powdered milk also attracted attention.¹⁰³ In 1887 the Chris Hansen Laboratory brought out Junket, a custard made of rennet, flavoring, and milk. The dessert appealed to Hoard as a possible new inducement for milk consumption. And finally, the Jersey Bulletin did its share for progress by pointing out the nutritional value of milk.¹⁰⁴

In butter making, the old method of letting the cream sour naturally in order to improve the butter flavor was gradually abandoned because it was too uncertain. There was always the possibility that foul bacteria might ruin the butter. Consequently, the use of starters, that is, cultures of bacteria which produced the desired flavors, came into prominence. Some dairymen and editors opposed the innovation, but they were regarded as cranks.¹⁰⁵

In 1891 both the Creamery Journal and the Jersey Bulletin carried the first really enthusiastic articles on the milking machine.¹⁰⁶ The Cooley creamer, a device for keeping the cream cool while it rose for skimming, was praised in 1887,

but by 1892 the centrifugal separator was coming into vogue. Jenkins opposed this innovation on the grounds that it did not work well and was too expensive. By 1900, however, the separator had supplanted the gravity process in creameries and on many farms.¹⁰⁷

Technical advances were accompanied by new information on bacteriology.¹⁰⁸ For the most part, the editors emphasized the practical aspect of the new science and demanded cleanliness. The dairy journals opposed the use of chemical preservatives partly on the ground that they were poison, but mostly because they engendered carelessness in the farm and creamery.¹⁰⁹ The editors assured their readers that there were only two decent preservatives, cleanliness and coldness.¹¹⁰ No mention was made of pasteurization, but that subject was to demand attention later.

Koch Makes Possible Battle against Tuberculosis

In 1882 Koch isolated the tuberculosis bacteria, and by 1892 there was a lively controversy between scientists about the transmission of bovine tuberculosis to humans. In the 1890's the editors could still choose their side and quote an authority to support their position.¹¹¹ Meanwhile, the editors showed some interest in the tuberculin test of Koch. This test, discovered in 1890, would indicate if an animal or human had tuberculosis. In 1892 the test was still something of a curiosity, however, and had not yet roused farmer or editorial ire.¹¹²

By 1892 farmer periodicals had begun special veterinary columns. In contrast to earlier columns, the answers to correspondents became more cautious, seemed to be based on some science, and the various conductors of the departments were generally graduates of some veterinary school. Sterilization was not yet emphasized in the veterinary columns, but there was some mention of the relation between bacteria and disease. The columns indicated, however, that out in the world at large, the practice of veterinary medicine was still largely in the hands of quacks.¹¹³

By 1892 the tremendous expansion in the dairy industry, combined with advantages in technology and bacteriology, seemed to forecast a prosperous future for the industry. In 1887 the Jersey Bulletin reported, "There is no mistaking the signs; they all point to great improvements in all kinds of business. The Jersey outlook is exceedingly bright."¹¹⁴ Four years later the American Creamery echoed the prophecy of good times ahead.¹¹⁵ Hoard contented himself with

less sweeping statements, but his weekly analyses of the markets seemed to indicate prosperity if the farmers would only follow his advice in regard to winter dairying and high-quality production. There was, he asserted, no foreseeable danger of overproduction.¹¹⁶

Between 1866 and 1892, processing and distribution of foods entered the industrial age. The manufacture of cheese and butter largely centered in the factory, new creameries appeared in profusion, and the commission agent and warehouseman assumed new importance in urban distribution of dairy products. Trusts and monopolies became prominent in all lines of endeavor, even agriculture. These several changes gave rise to journals devoted to manufacturers and distributors of dairy products.

Old problems continued to interest the editors. Editors urged farmers to treat their cattle kindly, feed them fully, and test their yields. Disputes between breed organs continued, while the argument over single- versus dual-purpose cattle went on much as before. The fight against oleomargarine occupied some editorial space, and some restrictive legislation was obtained on state and local levels.

Undoubtedly the invention of the Babcock test in 1890 and the discovery of the tuberculin test in the same year were significant developments. The Babcock test presented the first away-from-the-laboratory method for testing the quality of milk and the productiveness of cattle. It also offered the first equitable basis for payment for whole milk. The tuberculin test was soon to reveal the extensive infection of American cattle and was to make eradication possible by indicating diseased animals. Since tubercular animals could be located before the disease was far advanced, it was possible to cull herds and reduce the incidence of tuberculosis.

Chapter 6 - The Depression of the Nineties 1893-1895

Dairy Journalists Face Depression with Courage

In 1893 the Philadelphia and Reading Railroad failed, 573 banks and loan companies collapsed, and 15,242 commercial firms went out of business. By 1894 the production of pig iron was reduced by a third; wage cuts were accompanied by strikes, lockouts, unemployment, and falling farm prices.¹ Hard times continued from 1894 to 1896. During this period Coxey's army of the unemployed marched on Washington, the Populist movement made its last surge toward power, and the demand for free silver reached a new height. Every prophet, including the dairy journalists, had a solution for the problems of the depression. The ideas of the dairy journalists, however, were simple and conservative: work hard, increase production, and all will go well.

In spite of the financial dangers involved, thirteen new dairy journals were begun between 1893 and 1895. As usual the dairy farm papers were shorter lived. Subscriptions decreased in number, and but little advertising was available. There was, in fact, very little which the farmer could be persuaded to buy. This fact apparently was not clearly evident to the prospective editors.

The first of the new farm periodicals, the weekly News and Dairyman, was published at Hartland, Wisconsin, between 1893 and 1895.² The journal combined the functions of country weekly and dairy paper and apparently had a limited circulation and influence. In the field of dairy journalism, it was necessary to have strong local support at the beginning. However, there was but one successful dairy-farm periodical, the Pacific Dairy Review, which did not have a national circulation. Except in the case of trade journals, any effort to begin a local dairy journal was bound to fail. The News and Dairyman was another example of the editorial error of aiming too low.

The News and Dairyman was followed by the Practical Dairyman and Agriculturist, first published at Chatham, New York, in 1893 by J. Wallace Darrow. He described the paper as "a monthly Journal Devoted to the Farm and Dairy Interests of the United States," with a subscription price of fifty cents a year.³ The typography of the paper was excellent, and the articles were written with something of a literary style. In 1897 the Practical Dairyman and Agriculturist changed its subtitle to read: "Our field, The New England and Middle States."⁴ The emphasis on a more restricted geographic area was probably intended to secure greater local support, but the maneuver was not successful. In 1898 Darrow sold the paper to E. Chubb Fuller, of Indianapolis.⁵ After September, 1898, it was printed at Indianapolis but edited from New York. At the same time Fuller shortened its title to Practical Dairyman.⁶ In November, 1899, the title was lengthened to Practical Dairyman and American Stockman, probably in an attempt to increase circulation by emphasizing an interest in breeding. One year later the journal was absorbed by the Agricultural Epitomist.⁷

Farmer and journalistic interest in purebred stock led C. E. Morrison to start his monthly Blooded Stock at Londonderry, Pennsylvania, in 1895. In 1896 the paper moved to Oxford, Pennsylvania, where it remained until it was moved to New Market, New Jersey, in 1911. For about two years between 1908 and 1911 the paper was titled, Blooded Stock, The Eastern Farmer, Dairyman and Poultry Raiser. Throughout its life the journal carried dairy information in the proportion of about two pages out of twenty-four and obviously was not exclusively a dairy journal. It died in 1913.⁸

In 1895 the American Guernsey Cattle Club began the Herd Register and Breeders' Journal, which appeared monthly and sold for two dollars a year. It was apparently intended to provide a historical record of Guernsey interests and ceased publication in 1903.⁹

In the Pacific Northwest, Guy MacL. Richards, apparently undisturbed by successive failures of dairy journals in the region, began the Pacific Coast Dairyman at Tacoma, Washington, in 1895. The paper appeared semimonthly, cost one dollar a year, and consisted of from eight to twelve pages an issue.¹⁰ In his initial number Richards announced rather ambitious intentions: "With the intelligence and energy the editor is capable of bringing to bear, there is hope that this paper may soon become to the infant industry in this new country, what the venerable ex-Gov. Hoard's paper

is to the dairy industry in the North Central states."¹¹ The paper died in 1898.¹²

The Northwest Horticulturist, Agriculturist, and Dairyman, a general agricultural paper until 1913, may have contributed to the collapse of the Pacific Coast Dairyman. Although the Horticulturist had been in existence since 1888, it did not add "Dairyman" to its title until 1895, and then promptly dropped the addition in 1899, immediately after the failure of the Pacific Coast Dairyman.¹³ During this period the Horticulturist carried only one dairy page, most of it clipped and pasted.¹⁴

Start Journals to Serve Dealers

The middlemen of the dairy industry were able to support several new papers. In 1894 a produce merchant's journal appeared in Chicago, and in 1895 trade journals were started in Chicago, New York, and Des Moines. The first of these journals was Chicago Markets, which changed title to Chicago Produce in June, 1894. The journal, founded by George Ingersoll and Charles Y. Knight, cost \$1.50 a year, appeared weekly, and was from the first primarily concerned with dairy products, eggs, and poultry.¹⁵ Advertising patronage was apparently good. The paper increased in size from twelve to twenty-four pages between June, 1894, and April, 1895. In June, 1894, the journal dropped the title Chicago Markets because there was already a paper of that name in existence.¹⁶ In 1898 the periodical changed its title to Chicago Dairy Produce and in 1927 took the name Dairy Produce. It ceased publication in 1942.¹⁷ Chicago Produce prospered from the beginning. As the editor boasted in 1895: "There are two other weekly papers in the field purporting to cover the same ground covered by CHICAGO PRODUCE. One was started some five or six years ago, and boasts of eight pages. The other claims to be the only and oldest creamery paper in the field, and runs sixteen pages, CHICAGO PRODUCE being just as large as the two put together."¹⁸ By 1910 both competitors had disappeared, but Chicago Produce still had more than thirty years of life left.¹⁹

A similar trade paper was begun in New York in 1895, when F. G. Urner and L. F. Barry began the weekly New York Produce Review. In 1897 this journal merged with American Creamery to form the New York Produce Review and American Creamery.²⁰ In 1930 the periodical changed title to the American Creamery and Poultry Produce Review

and in 1937 became the American Produce Review. In 1939 the paper split into three publications: the American Milk Review, the American Butter Review and the American Egg and Poultry Review.²¹ In spite of many title changes, the paper began and remained primarily a dairy journal.

The Milk News of Chicago, begun in 1895, was issued semimonthly by David Oliphant, publisher, printer, and apparently editor. He announced that his paper was "devoted to the interest of Dairymen, Milkmen, and Creamerymen. Subscription, \$1.50 per year, in Advance."²² A few months later, he told his readers, "Let it be understood that our rate is now one dollar per year. Send in your subscription."²³

By 1907 the Milk News had been sold to J. M. MacVean, the subscription price had decreased to fifty cents a year, and the journal had somehow managed to become the official organ of the Milk Shippers Union and the Illinois Milk Producers Institute.²⁴ These honors were probably posted to show both influence and affluence, because official organs did receive some support in subscriptions from the sponsoring organization. The paper ceased publication in 1922.²⁵

The last in this list of papers was the Creamery Gazette, first published by Henry C. Wallace at Ames, Iowa, in 1895.²⁶ The earliest copy in existence is that for July 15, 1896.²⁷ The Gazette sold for one dollar a year, contained about sixteen pages each issue, was intended for creamery managers, and went out of existence in 1900.²⁸ The Wallace venture was the only trade or technical journal which did not survive well into the twentieth century. The journal was lively and alert, and the cause of its demise is difficult to determine. The editor of the American Creamery had once made a comment on Wallace's Farm and Dairy which perhaps also applied to the Creamery Gazette. As Burrige ironically remarked: "If there is any one thing needed in Iowa it is another dairy paper."²⁹ The large number of Iowa dairy papers in existence in 1895, and especially the Creamery Journal of Waterloo, made the comment appropriate. The field was overcrowded.

Columbian Exposition Mirrors Dairy Progress

The Columbian Exposition of Chicago opened in 1893 and attracted more journalistic attention than the Panic of 1893. Exhibits at the fair ranged through agriculture, anthropology, electricity, mechanics, and other categories. There were also exhibits of countless agricultural products, including displays of chewing tobacco and beer. There was a dairy

department which occupied a small part of the space assigned to agriculture. In the vast scheme of the fair, the dairy exhibition was only a minor part of the whole. Nevertheless, the editors considered it to be the chief attraction at the exposition.

The dairy division included a dairy barn, arranged and equipped according to the best ideas of the time, and a practical dairy school where advanced techniques were demonstrated by students. Foreign countries sent samples of their dairy products, and foreign manufacturers displayed machines and other devices. Cheese was the main exhibit of most foreign nations. The French entered Camembert, Roquefort, Brie, Livarot, and Coulommiers, while the Netherlands sent Edom and other cheeses. The Germans, Swiss, Swedes, Italians, Danes, Mexicans, and Argentines also entered their particular varieties of cheese, presenting the visitor with a multitude of unusual smells. The list of mechanical contrivances was most impressive, with samples running from cream raisers and coolers to the latest high-capacity, steam-operated separators. Manufacturers displayed farm and creamery churns, hand- or steam-operated separators, and various sizes and shapes of Babcock testers. Engines and boilers, more properly a part of the mechanics division, were also brought to the attention of the dairymen. Milk aerators, vacuum pumps, and condensers were exhibited along with wooden churns and cheese vats. The creamerymen could see the power butter worker, while the farmer's wife could inspect a variety of butter molds. Ice cream freezers, apparently of commercial size, were displayed to the public, indicating that this newest of dairy industries was growing to respectable size.³⁰ In short, everything imaginable connected with dairying was on display, and much of it was in use in the dairy school. The dairy exhibition also carried displays and explanations of the various chemical and vegetable dyes for butter and cheese, as well as exhibits of powdered rennet for cheese making. These exhibits were designed to appeal to both farmers and factorymen.³¹

Although the various exhibitions were probably interesting to members of the dairy industry, including dairy editors, most journalists hardly noticed them. One of the dairy editors intrigued by the fair, Jenkins of the Jersey Bulletin, even moved his editorial offices to Chicago expressly to cover the exposition. The American Creamery also moved to Chicago, ostensibly to get closer to the center of the

dairy industry. Other journalists planned to carry special reports on the events at Chicago.

The journals followed the preparation of the various state entries, and informed their readers how the fair was shaping up.³² The editor of the American Creamery noted in May, 1893, that he had not said much on the great undertaking at Chicago:

But now as the time draws near for our readers to plan for their visit to the city, we shall, in each issue, give you items of information concerning it. It opened May 1, but we will be honest with you and tell you that it will not be worth seeing before June 1st. Not one per cent of the exhibits were ready May 1st. But few, if any, of the buildings are completed. Very few of the exhibits have reached their allotted places, to say nothing of getting them ready for exhibition. So don't fool away your money on an early visit but wait till things are ready. We will tell you when.³³

By July, 1893, the American Creamery was convinced that the dairy industry of the country had been "very shabbily treated" and that the exposition was neither beneficial nor important.³⁴ Burrige was particularly upset because "it was wrong to put the exhibitors of dairy machinery in such a location in the Agricultural building that the public can not get at them. These men expended thousands of dollars on their exhibits and now they are in a skylight parlor where not one visitor in 10,000 can ever find them."³⁵ The Creamery Journal vigorously repeated this objection, but went further. Kimball's special correspondent noted that the proceedings were dominated by the same old gang of "salt sellers, butter worker cranks, and separator liars" who were present at most state fairs. The dairy show, it was claimed, was run by a Jersey man who was otherwise unfamiliar with dairy matters. Kimball charged that the various manufacturers of dairy machinery had no opportunity to enter comparative tests because the Jersey breeders allowed the use of only one brand of machine. It was variously maintained that this was done so that no eyes should shift from the Jerseys or because the Jersey breeders had been corrupted by certain manufacturers.³⁶ Apparently the model dairy barn was not all it should have been. As the Creamery Journal observed: "For the honor of American dairying it is to be hoped that cold weather will prevail as otherwise the "working dairy" will smell loud, louder even

than an ancient 'Limburger.' Any one entering the building by the south door will get a fine mixture of sewer smell from the dairy and water-closet smell from the Anthropology building just opposite."³⁷ In contrast, the dairy-farm editors knew what a cow barn might smell like. They did not complain about the odor of a herd of cattle.

Babcock Test Gains Approval

Several of the technical journalists, in spite of their general disapproval of the arrangement of dairy exhibits, did note some important results from the fair. The increased acceptance of the Babcock test (only Jenkins was unimpressed with the test) was one significant result of the exposition. As Monrad of the Dairy Messenger put it:

If the Breed Test at the World's Fair has accomplished nothing else but to convince the Jersey breeder and other doubting Thomases, that the Babcock test is in every way superior to the churn, for such competition as well as for record, it has been worth all its costs, and we are pleased to note that the committee, including Mr. Fuller, all agreed to use the Babcock test for the last tug of war—the young herd test.

Nor is this the only thing which has been demonstrated, it has also confirmed the fact which so many cheese-makers and patrons of cheese factories still dispute, namely that it is perfectly fair to pay for milk at a cheese factory according to the percentage of butterfat.³⁸

Hoard's Dairyman even went further and insisted that the prevalent system of paying by weight of milk was grossly unfair. In the cheese test the Shorthorns had produced more milk, but more had been required to make a pound of cheese. If the Shorthorn milk had been bought according to weight, it would have received the most money, although the Jersey with a much smaller weight of milk made a proportionately greater amount of cheese. Probably, as Monrad claimed, the tests at the fair did help to introduce the fat test into cheese factories.³⁹

Monrad very early reported on the various creamery devices and apparently kept informed on events at the dairy exhibit. He was particularly depressed to hear the agents for evaporated milk manufacturers claim that their product was cream. He even discovered and publicized the trick of calling condensed skim milk just "condensed milk." As Monrad saw it, milk was not entitled to the name unless it

contained its full share of butterfat. Monrad felt that his protest in the Dairy Messenger would not reach the people most concerned, the consumers, and so he called on the city papers to publicize the mislabeling.⁴⁰ The condenseries were also charged with fraud in labelling evaporated milk as evaporated cream.⁴¹ Condensed milk processors had not, however, yet begun to substitute vegetable oil for cream.

Stage Battle of the Breeds at Exposition

Early in 1892 the various breed organizations had begun to make preparations for the Columbian Exposition. Members of the Holstein-Friesian Association were apparently reluctant to send a contingent of cattle to be tested at the fair, but the Jersey, Guernsey, and Shorthorn breeders arrived in force. The battle of the breeds between Island cattle and Holsteins did not come off, however, because in December, 1892, the Holstein breeders decided not to enter the contest. Nevertheless, the contest between Jerseys, Guernseys, and Shorthorns took place as scheduled.⁴² The contest between the breeds was highly complex, since the rules were designed to test every possible productive quality of a cow. As the official historian of the Columbian Exposition explained: "The competing herds were tested in May in respect to their cheese producing qualities, and June, July, and August for butter making. The tests, besides the quantity and quality of the butter, took into consideration the nutritive value of the skim milk and buttermilk and the increase or decrease in the weight of the competing cattle."⁴³ The amount of food required by the several breeds was also recorded, and the cost of it was duly entered into the calculation. These qualifications resulted in a complicated system of judging which very nearly made the contest meaningless. Jersey milk made more and better cheese, but Guernsey milk was produced more cheaply, while the Shorthorns put on the most weight.⁴⁴ The value of the cheese was then compared to the value of the beef steak. Naturally, no conclusive decision was reached on the merits of the several dairy breeds. Under these circumstances there were some hard feelings between segments of the dairy industry when the testing was complete.

The farmer papers criticized the way the dairy implements were exhibited and also objected to the manner in which the contest between breeds was handled. Jenkins of the Jersey Bulletin was primarily concerned with the Jersey cattle at the fair, and the bulk of his material concerned

their condition and performance. He noted with pride that "in the Jersey barn the cows eat while they are being milked." A prevalent fear that the Jersey would prove too temperamental for exhibition was dispelled by this seeming indifference.⁴⁵ In other respects, Jenkins was not much better pleased than other editors. He was perturbed to find that the butter made at the World's Fair sold for only thirty cents a pound, while many, and perhaps all, of the lunch counters at the fair used oleomargarine and called it butter.⁴⁶

Hoard's Dairyman was generally well pleased with the course of events at Chicago. As usual, Hoard criticized the Jersey Bulletin because he felt that Jenkins misinterpreted the results of the tests. Writing of the Bulletin, he noted, "If any breed of cattle ever had occasion to plead for deliverance from unwise friends, the Jerseys are that breed."⁴⁷ Hoard also charged the American Creamery with expecting impossible results from the competition. Otherwise the Dairyman contented itself with reports on the tests combined with cautious appraisals of the results.⁴⁸

The contest had hardly begun when the Creamery Journal insisted: "As a contest between different breeds it is of no value whatever. Nothing in the park has a ghost of a show except the Jersey herd, and so far as comparisons between Jerseys and other breeds is concerned there is really nothing being learned. Everything is Jersey and all the organization is based on a Jersey estimate. It is a splendid exhibition of what Jersey cows can do, but there is no chance for fair comparison between them and other breeds."⁴⁹ The American Creamery believed that the Holstein breeders had been forced out of the Exposition, although this charge was never well substantiated. The journalists united in calling the judges incompetent, but it was not until September of 1893 that the National Dairyman located what it considered to be proof of corruption in the dairy division.⁵⁰ In the final analysis, most of the technical journals would have agreed that "it would have been better for the dairy interests of the country if it [the Fair] had been ignored altogether."⁵¹

Even Jenkins agreed that the butter judging had not been competent, although he complained chiefly that the Jerseys had not scored high enough. In other respects Jenkins was well pleased with the judging, since the Jerseys won in all departments of the butter test except flavor. They even outproduced the Shorthorns and Guernseys in total milkyield.⁵²

The indecisiveness of the contest (all breeders asserted

they had won, if all factors were considered), the fact that the Holsteins were not entered, and the general aura of allegedly incompetent and dishonest judging, gave a severe blow to public cow testing. Cattle were to be on exhibition again, sometimes they were to be tested, but the fair of 1893 was the last of the cow contests. The farm journalists seemed to have learned nothing except what they already knew. They observed that other periodicals were prone to error and that special dairy breeds were superior to scrubs or Shorthorns.⁵³ The great exposition which had promised so much was something of a failure in the eyes of the technical journalists. It had been actively discussed before it occurred and had certainly occupied space while it was in session. Nevertheless, after 1893 the journalists quickly dropped the subject and turned to other matters.

The dairy editors reflected little interest in foreign commerce. Foreign trade became prominent again (as it had been before the Civil War) only after 1898.⁵⁴ The editors were, however, interested in foreign techniques and organization. The Dairy Messenger of J. H. Monrad regularly ran a column entitled "Jottings from Foreign Exchanges."⁵⁵ Another type of article which was to become popular was that which told of dairy methods in Europe. In 1893 the Creamery Journal carried an article on "SOMETHING ABOUT DAIRIES IN HOLLAND," which was typical of this class.⁵⁶ Articles on such subjects as Russian laws against oleomargarine and the kaiser's dairy farm were also popular.⁵⁷ Since the older journals carried the bulk of these articles and since the newer journals generally had the greatest trouble filling their pages, foreign news apparently was not mere filler. The Americans had in time past relied on foreign periodicals for most of their material. About the time of the Civil War, however, the editors had gradually asserted their independence. By the 1890's they were beginning to find supplementary information in European journals. The new development seemed to evince a growing self-confidence; the editors could borrow from Europe without destroying American institutions, and such copying was no longer considered servile.

Editors Avoid Economic Issues

In contrast to the older journals, the papers which began between 1893 and 1895 on the whole were slow to enter inter-publication fights, failed to use foreign material, and for some reason or other did not give much editorial space to

the depression. As a matter of fact, even the older journals seldom mentioned the economic troubles of the time. As before, it was noted that the dairy industry suffered least during a depression, although in 1893 merchants and processors suffered less than farmers.⁵⁸ If the editors did not have more to say, it was not because they lacked ideas. Their silence was self imposed, for as Kimball of the Creamery Journal remarked: "THE CREAMERY JOURNAL has its own views of the cause and cure, but, from obvious reasons, can not use its columns to discuss them. There is, however, a feature which it is proper to discuss, and our duty to treat at reasonable length, and this is the relative standing of the dairy business as compared with other industries" ⁵⁹ In this comparison dairying appeared to advantage. The editor counseled his readers: "The horse you ride is a stayer. So long as grass grows and water runs there will be something for you to do, and so long as you do well, your income is assured."⁶⁰ This statement fully expressed the common editorial view. There was to be no tampering with economic laws; just let nature take its course, and dairying would prosper. One editor even ran verse opposing interference with God-made economic laws:

Alas, that God such lack displayed,
 In making laws to govern trade,
 Without some modern statesm'n's (?) aid
 In these great questions,
 When Bill McKinley could have made
 Such wise suggestions.⁶¹

The verse was attributed to an Illinois coal miner.

God and McKinley were taken out of the picture by Oliphant of the Milk News, who observed that in the milk trade one of the chief difficulties was that people often failed to pay their bills. He attributed business failures to this cause alone, and recommended milk delivery on a cash basis, because as he remarked: "It is oftentimes the case that a customer has obtained credit to his detriment. A small bill could have been met, but a large one cannot be forced."⁶² This particular piece of editorial advice offered no solution to the depression, and indeed, the editors seemed to have no better ideas.

As in previous years, the editors made some general inspirational observations which could be applied to current problems. Previously they might have quoted Abraham Lincoln or some other American on matters inspirational.

In the 1890's, however, foreign statesmen were quoted on various subjects. The American Creamery, for example, carried a piece in praise of hard work which had been written by Gladstone.⁶³

Advice on virtue was sometimes accompanied by appeals for Christian charity. Some of these were unusual. The readers of the National Dairyman were urged to send stamps to a girl who had lost both legs in a train accident. She could obtain a pair of artificial legs if she collected one million stamps.⁶⁴ But dairy journalists usually reserved most of their space for advice on dairying and attacks on oleomargarine.

Good advice was often poured into clumsy verse, especially in the technical journals. As in the past, farmer periodicals avoided this form of instruction and entertainment.⁶⁵ Chicago Produce carried a large amount of verse relevant to good trading practices, but a bit of doggerel run by the cynical Dairy World in 1894 may serve as a typical example. The couplet, taken from the Detroit Tribune, offered some observations on the then prevalent system of milk distribution:

A City Ditty.

When the milkman in the morning rattles all the cans
and pails,
Then it is the water pressure in the second story fails.⁶⁶

Odds and ends of information not related to dairying appeared from time to time, generally in the newer and the weaker papers. Apparently the difficulty of filling space which had haunted the Dairyman's Record in 1859 was still a threat to the newer papers. Or the editors may have been striving for wider readership when they carried such articles as: "The Milk Bath for Ladies," "Primitive Inhabitants," and "Introduction of the Reindeer in Alaska."⁶⁷

Editors Discuss Labor Unions

From time to time editors also expressed attitudes toward labor unions. In 1894 the editor of Chicago Produce revealed his feeling when he referred to the railroad strike of that year by saying, "when mobs were burning railroad property and defying the government."⁶⁸ References to labor unions were infrequent, but from 1860 to 1950 there were few favorable comments on these organizations in any dairy journal. Of course this antagonistic or indifferent attitude

on the part of the editors did nothing to improve labor union attitudes toward the dairy industry. Some of the later disputes between city boards of health and the dairy industry may well have been intensified by such strained relations. Organized labor's support of pro-oleomargarine legislation might also have stemmed in part from the unfriendly attitude of dairy journalists toward unions.

In spite of the depression of 1893-98, the consumption of dairy products steadily increased, but at the same time, sales of oleomargarine grew even faster. The editors could only conclude that the substitute increased in use simply because there was not enough butter to go around.⁶⁹ Knight, of the Chicago Produce, noted the relation between oleomargarine sales and the depression, but he was the only editor to do so. In 1893 he explained that "oleomargarine people have been more active the past year than ever before. Owing to the business depression of last winter and the scarcity of good butter, oleomargarine was consumed in heavy quantities. For months during the winter it was almost impossible to move storage goods, and even fresh makes of butter which were not fancy found little sale. Consumers who were able to pay for the pure article wanted only the best."⁷⁰ The analysis was fairly accurate, but did not go far enough. Neither the editor nor his contemporaries grasped the fact that when consumer buying power was low, high priced butter could not meet the competition of a cheaper substitute. The consumer simply preferred to buy what he could afford. Knight, of Chicago Produce, pointed up the difficulty without advocating a solution or even suggesting that he saw the basic cause of the trouble. "The question of ways and means for heading off the inroads of Oleomargarine upon the butter business has received so much attention from different newspapers, individuals, legislative bodies and creamery organizations that it does not appear possible at this time to advance any new ideas upon the subject. The article has been taxed, some states have required manufacturers to color it pink, while others have forbid its being colored at all. Yet consumption increases every year. The question now is, what is to be done?"⁷¹

At the same time that Knight was pleading for more light, the city papers were castigated for their support of the substitute. The editor of the Creamery Journal angrily asserted that the city dailies were bought up by the oleomargarine interests, a charge which was to be repeated later.

The dairy editors begged for popular support in the fight against oleomargarine, although they had no clear idea of what should be done.⁷²

Battle of the Breeds Rages

Similar confusion of objectives and means surrounded the question of breeds. In the past only periodicals for farmers were interested in breeding, but by 1893 the technical journals added their voices to the general uproar. Apparently the general agricultural periodicals no longer offended the dairy editors with outmoded ideas on breeds of cattle. Instead, papers read at farmers' conventions were assailed. As Jenkins observed:

It is provoking and almost disheartening to read some of the dreary platitudes that are unloaded on the helpless farmers and dairymen every year by some of the lecturers and speakers who are invited to prepare papers. We have just been looking over one such, dumped on a western convention recently on dairying, in which is given the history of the several breeds of cattle, as given by Youatt and others at least a century ago, followed by the advice to "secure a Shorthorn bull from a good milking family and cross him on well selected native cows of good size and quality." And yet we boast of the spread of dairy knowledge and the improvement in dairy practice within the past quarter century!⁷³

Jenkins was outraged but it is possible that the advice given was what the farmers wanted to hear, or in any case, needed to hear. Certainly, no convention speaker would have cared to give as glowing praise to the Jersey or Guernsey as the Jersey Bulletin was willing to give the former breed.⁷⁴

The American Creamery left its field of special competence to enter the breed discussion by contradicting Hoard and asserting that dual-purpose cattle did exist in the form of Shorthorns, Red Polled, Brown Swiss, and Holsteins. The editor claimed that the special-purpose cow was in no way superior to the general-purpose breeds he mentioned. Richards, of the Pacific Coast Dairyman, entered the discussion rather cautiously with the moderate observation that the general-purpose breeds would eventually become specialized.⁷⁵

Particular breeds aside, the National Dairyman took as grim a view of the average cow as did Hoard. The editor asserted that the average cow robbed the man who owned

her.⁷⁶ Whatever the status of the general-purpose cow, it was obvious that the scrub was under united attack from all quarters. Oliphant of the Milk News apparently had an eye out for good literature, as well as good cattle. Consequently, Shakespeare was entered in the battle of the breeds with a few lines based on Richard III, and the scrub cow described as:

Curtailed of fair proportion,
Cheated of feature by dissembling Nature,
Deformed, unfinished, sent before your time
Into this breathing world, scarce half made up,
And that so lamely and unfashionable
That dogs bark at you.⁷⁷

While the quarrels over breeding seemed to go along much as ever, the problems of feeding were limited to discussions of the drought which began in 1893. As a correspondent wrote to the editor of the Dairy World: "The widespread and protracted drouth last season serves, or—should serve—as an object lesson to dairymen universally. We have had experience with drouths before; in fact, though often agreeably disappointed, we are in the habit of looking for, and making preparation for,—drouth,—annually."⁷⁸ The author then went on to advise soiling (that is, feeding cut greens in place of pasturage) during August and September. The crops he recommended were green corn, sorghum, pearl millet, teasinte, cow-pea vines, peanut vines and sweet potato vines. By this supplemental feeding the pastures could be saved, and the flow of milk sustained.⁷⁹ This advice probably came from a state east of the Mississippi, since there was no mention of failure of these soiling crops for lack of water. Farther west, however, the problem became one of finding a crop which would resist the drought. The National Dairyman, located in Kansas City, Missouri, seemed about the only paper which handled the problem. Its editor directed farmers' attention to Kaffir corn, because it resisted drouth better than corn.⁸⁰ The National Dairyman also advocated the use of ensilage in arid regions and gave explicit directions for the construction of various kinds of silos.⁸¹ The drought conditioned all advice on feeding from 1893 to 1895.

As for butter making, the use of preservatives and cleanliness were about the only questions of any consequence. The Babcock test controversy subsided for a few years, although it opened up strongly enough after 1895. Knight, of

Chicago Produce, noted that some Wisconsin farmers opposed the test. He suggested that farmers were still voting for Andrew Jackson up in that section of the country.⁸² There were almost no other comments on the subject.

Cleanliness and preservatives were closely connected with techniques for ripening cream. Editors had observed that in the long run sweet cream butter, while it had less "flavor" at first, kept better. Farmers were therefore encouraged not to ripen the cream, but to use it while fresh. But dirty cream did not stay sweet long, and so farmers were tempted to compromise with cleanliness. In the early 1890's a commercial preservative called "Preservaline" was introduced, but was immediately attacked as "the dirty milkman's makeshift."⁸³ Editorial sense of responsibility can be estimated by the fact that the preservative was condemned, even though the editors might have profited by advertising the product.

As a substitute for chemicals, but only as a supplement to cleanliness, the editors observed that freezing butter was an excellent way of storing it.⁸⁴ At the same time, Chicago Produce, for example, carried an article by Professor H. L. Russell on the benefits from, and methods of, pasteurization.⁸⁵ Cleanliness, cold storage, freezing, and pasteurization gradually came to be the chief means of preserving butter. These methods, first urged by the dairy editors, were slowly accepted by creamerymen. Nevertheless, the twentieth century was well along before the new techniques were in general use.

Of course, butter making details still occupied some space in the journals, but on the whole, the instructions had changed very little in the years since 1885. Even in this business, cleanliness, especially in the creamery, was the chief concern of the editors. Mottled butter was first mentioned in the dairy press during the early 1890's.⁸⁶ The subject attracted editorial attention well into the 1940's, although little progress was made in determining the cause. Probably this defect in butter had long existed, but it was not until relatively good creamery butter was produced in quantity that anyone thought to remark on the imperfection.

Perhaps the unusual number of creamery fires was connected with the depression. As Kimball, for one, remarked: "Some of the fire insurance companies of Iowa have ceased to write creamery risks. Local agents assign as the cause of so many fires some queer reasons, among which are neighborhood quarrels over the management of farmers'

creameries, and unprofitable business among individual creamery men."⁸⁷ The editor did not think much of these reasons, but he did have some alternative explanations. He apparently expected the causes of the fires to be removed when brought to light, for he merely observed: "THE CREAMERY JOURNAL doesn't attribute the extensive losses of creameries by fire to incendiaryism. Defective smoke stacks and the absence of employees from the creamery during the afternoon are more probable theories, and the additional fact that the ashes are scraped out and deposited carelessly where there are half charred cinders, are sufficient causes to account for the destruction by fire of so many creameries."⁸⁸ In Iowa alone the destruction of creameries was considerable. In 1895, twenty-six were lost by fire, while fifty-eight went out of business.⁸⁹ That is, loss by fire almost equalled half of the business failures in the depression year of 1895.

Many Creameries Are Closed

Business failure also interested the dairy journalists. Between January and July, 1894, over 700 creameries were begun in the United States, and one editor at least felt obliged to warn the buttermen about the pitfalls in the trade. He observed that the market was not good and that there might be some disappointments ahead. On the other hand, in 1895 Chicago Produce predicted a good year for butter consumption, but did so with something of the tone of a man talking up his courage.⁹⁰ Editors agreed, however, that more and better production would go far toward solving many economic problems.

The hazards of the market included more than economic forces, since in the early 1890's the various cities teemed with dishonest commission merchants. The editors, of course, insisted that there was no need of being swindled if the farmers and creamerymen would subscribe to a trade paper and check on the reliable houses.⁹¹ In 1896 the Milk News went a step further and demanded direct action: "An organization of shippers for mutual protection is spoken of in some milk shipping localities. This sort of organization has become a necessity, as a protection against the professional dead beat, can thief and contract breaker."⁹² Editors also attacked other allegedly dishonest practices. The journalists of Chicago were particularly caustic about the Elgin speculators, who were accused of conniving to set prices.⁹³ At the same time, Chicago Produce was outraged

at alleged discriminations in freight rates. Apparently the campaign of Knight for lower rates was successful, since complaints of railroad discrimination did not soon appear in his paper after 1895.⁹⁴

The quarrel with the railroads was a local affair and a passing one. The fight over tuberculosis, however, was nationwide and continued far into the twentieth century. In 1894 the lines of the battle were already being drawn. As a rule, the personal prejudices of the editors determined their position on tuberculosis. Some seemed to be influenced by what the farmers thought; others seemed ready to pick a quarrel with anyone on any side of the argument.

Editors Disagree on Tuberculin Test

In January of 1894 the National Dairyman praised the tuberculin test highly; by August of that year the Dairy World suggested (by means of a lifted article) that the tuberculin test caused the disease, which was probably not otherwise contagious "but in some way may be transmittable to some extent."⁹⁵ The tuberculin test indicated that an astoundingly large number of cattle had the disease. Some editors suggested wholesale slaughter, some suggested that a different system be worked out, and some claimed that the whole flurry was of no consequence since cattle could not transmit the disease to humans.⁹⁶

The oleomargarine manufacturers apparently took advantage of the appalling incidence of bovine tuberculosis to assert that butter was unfit to eat.⁹⁷ The change of roles momentarily surprised the dairy editors. In 1894, however, the National Dairyman replied vigorously: "The oleomargarine plutocrats can bring forth all the truths about unhealthy milk that their avarice and mendacity may prompt. The most rotten milk that has ever been poured down the throats of a suffering people is as pure as distilled water when compared to dirty hog fat; dirty, deceased ox and cow tallow, and milk and butter combined, under alleged scientific methods."⁹⁸ The editor then set down the future goals of dairy journalism: "We must not dodge the issue. We must eradicate tuberculosis as well as its twin, butterine."⁹⁹ Not all of the other journals joined the crusade immediately. At the same time, the farmers resisted eradication of tuberculosis when the program required uncompensated slaughter of cattle. Moreover, both urban and rural citizens continued to buy more and more oleomargarine.

With the exception of the ravages of tuberculosis and the

Columbian Exposition, the subjects treated by the journalists either stemmed from or were made more important by the depression. Editorial discussions of breeds and breeding, cattle feeding, cropping practices, marketing, and the conduct of creameries all showed the effects of the depression. Editors united in demanding some sort of legislation to hamper the sale of oleomargarine, but disagreed on the merits of the various breeds. Although the dual-purpose cow still attracted attention, all journals united to oppose the scrub. The journals were not able to influence many farmers, however, since the depression hindered or made impossible the purchase of purebred stock. Editors and insurance underwriters disagreed on the causes of an unusual outbreak of creamery fires between 1893 and 1896, but whatever the causes, fires were scarcely mentioned after 1898 and the return of prosperity.

Although editors seldom wrote on economic theory, they did profess a belief in the efficiency of economic laws and the necessity for allowing them to work unhindered. The journalists suggested that more and better dairy products be marketed as a solution to depressed farm prices. Apparently the solution was not effective. At least, it is worth noting that there was a depression until 1898. It was hardly possible to raise urban buying power by merely increasing the amount of butter on the market. And commercial dairying was above all dependent on sales in the metropolis. The very location of the great dairying regions indicated the relations between the city and dairying; a relationship which was denied by local enthusiasts and largely ignored even by the dairy journalists.

The periodicals experienced financial difficulties. Perhaps nothing emphasized the effects of the depression as much as the fact that not one new dairy journal came into existence between the end of 1895 and May, 1897. By contrast, thirteen journals appeared between 1898 and 1901. The depression of 1893-95 taught caution to prospective editors.

Chapter 7 - Depression, Westward Expansion, and Prosperity 1896-1901

Many Journals Started; Few Live

No dairy journals were started between the end of 1895 and May of 1897, but fourteen new journals were born between 1897 and 1901. Of these, five were in Kansas, three in Minnesota, two in Nebraska, and one each in Illinois, California, Mississippi, and Georgia. Out of these, only the ventures in San Francisco and St. Paul managed to live beyond the year 1910.

The first of the new journals, the St. Paul Dairy Reporter, began publication on May 11, 1897, appeared as a four-page weekly, and carried very little material other than market reports and advertisements. The editor promised to enlarge the paper and include more articles, but this change occurred only after the journal had been sold to E. A. Webb and H. M. Kimball in 1898.¹ In 1898 the paper was enlarged to sixteen pages and on December 26, 1899, it absorbed the Northwestern Dairy and Farm Produce of Minneapolis. The combined journals appeared as the Dairy Reporter. The merger took place in a friendly deal whereby the several editors sought to lump their advertising revenue.² The journal was superceded by the Dairy Record in 1903.

In 1898 Burton McCracken began the Northwestern Creamery Journal at Minneapolis.³ The paper appeared monthly and sold for one dollar a year. The timidity with which the editor entered the field of dairy journalism did not augur a prosperous future, for as McCracken explained:

It shall be our aim to make this publication a valuable one to the business man and the farmer, and to merit the approval and support of both.

It is true that we are not alone in this broad field of journalism, but there is ample room for all and we shall endeavor to add a fragrant blossom to the trade journal bouquet.

We trust your support may be forthcoming and in closing may we beg to receive the hand of good fellowship from the dairy press of the country.⁴

The words "merit," "endeavor," and "beg" were uncommon in editorials of the period. Indeed it would be difficult to find another example where editors chose to be as restrained in their regard for their competitors. Editors were not accustomed to greeting one another with the hand of good fellowship, and such a gesture was more than any editor might reasonably expect. The paper died in 1899.⁵

Between 1898 and 1901 five papers appeared in Kansas. In 1898 the Kansas Dairyman, a monthly, was established at Eureka by Mason and Faught with a subscription price of fifty cents a year.⁶ The editors felt they had a mission, but were apologetic about it:

In bringing into existence another publication in the midst of a world of books and cheap literature, one might almost think an extended apology needful. However, as we have none to offer, our real object may be interesting.

In establishing a creamery with its stations among a people largely devoted to stock raising, with comparatively few practical dairymen, the questions as to the care of cows, their feed, care of milk, raising calves by hand, the market profits, etc., etc., come before us every day.

.....
Looking over the dairy field we find nothing which meets this demand, nor solves the numberless problems of the practical dairyman. Realizing this need, we determined to fill, as nearly in our weak way as we might, this growing demand....⁷

The paper also died in 1899.

Jensen's Dairyman of Beloit, Kansas, carried about the same sort of information as the Kansas Dairyman, expressed roughly the same editorial purpose, and also served as the creamery house organ of the editor, one W. F. Jensen. The format was that of a four-page weekly county paper, with a large proportion of local advertising of a non-

dairy type. Like the Kansas Dairyman, Jensen's effort was inspired by a need which the farmers apparently did not share. The claimed circulation in 1900 was 1,600, but the advertising was still largely local.⁸ The paper ceased publication in March, 1900, with a promise that it would be succeeded by another unnamed paper—probably the Dairy Age.⁹

The procession of Kansas dairy papers continued with the Kansas Dairy Farmer, "Published monthly by Borman and Shawhan," at Enterprise in 1899.¹⁰ T. A. Borman acted as editor, and in setting its policy observed that:

A number of Kansas creamerymen who heretofore have printed and distributed among their patrons a monthly dairy bulletin, have subscribed for the KANSAS DAIRY FARMER and will give yearly subscriptions to patrons. The change is a good one and we would be pleased to have the example followed by the many.¹¹

The editor continued to ask for patronage until the venture failed in 1900.¹²

Southwest Has Rash of Dairy Journals

The Kansas Dairy Farmer was followed immediately by the Dairy Age, published at Beloit, Kansas, by K. W. and J. S. Parks in 1900. The paper appeared monthly, cost fifty cents a year, and professed a circulation range greater than any previous Kansas journal. T. A. Borman, of the defunct Kansas Dairy Farmer, turned up as editor and announced that the Dairy Age was "Devoted to the Dairy Interests of Kansas, Oklahoma and Colorado."¹³ In August, 1900, S. A. Jones joined J. S. Parks as publisher. The journal claimed a monthly circulation of 8,000 in 1900, but Parks sold out to one Chubbic in 1901. He probably would not have been disposed to sell if the financial affairs of the paper had been in good condition. Jones and Chubbic continued as publishers until 1902. Jones then continued as sole publisher until the paper died in 1903. This was the last of the Kansas dairy papers. The dairy movement in Kansas was apparently a depression measure. Instead of butchering cattle, farmers kept them and sold the milk. When beef prices rose, general interest in dairying seemed to end.¹⁴

In August, 1899, the Up-To-Date-Farmer of Lincoln, Nebraska, followed the lead of western farmers and changed to the Nebraska Dairyman and Up-To-Date Farmer. As Walt Mason, the first editor observed: "There is much work to

be accomplished in promoting the industry and it must necessarily be done by missionary work, as some are wont to term it, and Nebraska Dairyman will not be found lagging when it comes to doing its part. . . ." ¹⁵ In September, 1899, A. R. Israel took over as editor and continued in that position until October, 1908, when he was replaced by J. D. Edgerton as editor and owner. In July, 1909, the paper was sold to H. P. Rankin, who changed the title to Dairy Gazette and then promptly sold the paper. ¹⁶ In August, 1910, the Dairy Gazette was sold to Kimball's Dairy Farmer of Iowa. Thus ended the first Nebraska attempt at dairy journalism.

The new western interest in dairying probably encouraged N. W. McLain and J. L. Draper to begin their semimonthly Dairy and Creamery at Chicago in 1899. The title indicated that the journal was intended to bridge the gap between farm and creamery, but the paper was primarily devoted to dairy husbandry. It cost fifty cents a year, and at the end of 1899 the editor boasted of a subscription list of 20,000. Even if the claim was accurate, the paper soon declined. In 1903 Dairy and Creamery changed to a monthly, and in 1904 the paper was absorbed by Kimball's Dairy Farmer. ¹⁷

Only two papers, the Dairy Record and the Pacific Dairy Review, founded between 1896 and 1901, managed to survive. Both were technical journals, and both were begun after the country had come well out of the depression. The Dairy Record was the first to appear. Some time around 1900 the owner of the Dairy Reporter of St. Paul offered to give his paper to the Minnesota State Butter and Cheesemakers' Association. That organization wanted a publication to give dignity to the profession, and so the offer was accepted. ¹⁸ The Dairy Record, founded in January, 1904, thus became the lineal successor of the Dairy Reporter. Edward K. Slater edited and published the Dairy Record with very little assistance from the association until late in the same year, when the Dairy Record Publishing Company was formed. Half the stock was held by the Minnesota butter and cheesemakers and half by Slater. ¹⁹ In December, 1904, Slater was named Dairy and Food Commissioner for Minnesota, and as he explained: "I presented the association with my shares of stock and made plans to retire as editor at the end of the year. I never claimed credit for liberality in the matter. . . . I think a fair appraisal of the cash value of the stock at that time would have been about fifteen cents a share. Naturally, I wanted the support of the Dairy Record during my ap-

proaching administration as commissioner, and I didn't want any connection with the paper."²⁰ H. P. Olsen was nominal editor during 1905, although Slater continued to do most of the work. In 1906 Henry Sandholt assumed the position of editor. He was succeeded in 1922 by W. A. Gordon, who remained as editor of the Dairy Record beyond 1950.²¹ Throughout its existence the journal served the butter and cheese makers with technical advice, market information, and after about 1920, with observations on governmental policy.²²

The second long lived periodical founded between 1896 and 1901 was the weekly Dairy and Produce Review, first published at San Francisco by William H. Saylor on June 20, 1901. In March, 1906, the title was changed to the Pacific Dairy Review, and a month later because of the San Francisco earthquake the place of publication was changed to Oakland.²³ In December, 1906, the Oakland plant was destroyed by fire, and the journal moved back to San Francisco. In 1926 Saylor sold the paper to Robert E. Jones and G. H. Rothe. In 1932 W. H. Moebus replaced Rothe as partner in the enterprise, and in 1948 Moebus sold his share of the business to Jones, who continued as sole publisher.²⁴ In the beginning the paper was both a farm and technical publication, but during the 1920's the journal gradually concentrated on processing and merchandising.

Because of unstable business conditions between 1896 and 1898, the journalists devoted considerable space to general economic information, as well as to problems of marketing. Their advice ranged from encouragement of farm bookkeeping to demands that adulterated cheese be forbidden so that foreign markets could be captured.²⁵ The prohibition of adulterants and substitutes was supported with the evidence that Canadian dairymen had prospered after adulterated cheese had been prohibited and, most importantly, were taking over foreign markets.²⁶

At the same time, a few journals took up the old Granger attack on the railroads, while other editors called for improvements in the short-distance collection and transportation of milk.²⁷ As before, the dairy papers drew the attention of farmers to the high prices of winter dairy products. Some journals suggested that in time of distress the farmers might return to home dairying in order to bypass the middleman.²⁸ Everything was suggested which might help the industry through the depression, including many antique and almost forgotten techniques.

The journalists also attempted to keep the industry abreast of changing market conditions. The Elgin Dairy Report, Chicago Dairy Produce, and the New York Produce Review specialized in market reports, although all papers carried some information of this sort. The journals continually warned their readers of the sharks which inhabited the great cities, and farmers and creamerymen were advised to deal only with the recommended firms.²⁹

Journalists Place Greater Reliance on Government

Steps in the direction of a greater reliance on government had been taken in the 1880's when the first oleomargarine legislation had been passed. By 1896 the journals demanded more legislation to restrict the manufacture and sale of oleomargarine, but otherwise editors remained largely silent on legislative questions.

Nevertheless, a few of them publicly expressed political views. Kimball of the Creamery Journal professed disapproval of the practice of stating political and economic ideas, even while expressing an opinion of his own. In 1896, during the height of the presidential campaign Kimball observed: "It does not seem possible," says Bro. Charles Yosemite Knight, in a recent issue of his hitherto non-partisan paper, 'that creamerymen could for a minute favor such a thing as the free unlimited coinage of silver' and then the Chicago editor goes on to show the evil effects of the free silver, and to point out the fact that it would ruin the dairy business and the country generally. Charles dear, you had better turn your Hanna buttons in and keep out of the game. It won't do. Creamerymen...are not looking to us for tips on the political situation...."³⁰ Willson of the Elgin Dairy Report was less circumspect in his remarks. Instead of referring to Hanna buttons, he wrote plainly: "The first magazine article on William Jennings Bryan, at present the most talked-about man in the Democratic party, is a character sketch by a personal friend, Mr. Willis J. Abbot of the New York Journal, in the August Review of Reviews. Mr. Abbot's article, which is fully illustrated, is not only entertaining, but really helpful to the formation of an intelligent estimate of Mr. Bryan's capabilities and resources."³¹ These examples nearly exhausted the editorial entry into politics.

The farm-dairy periodicals continued to offer advice on the treatment of cattle. Articles appeared on calving and stabling, as well as on the merits of the several breeds.³² No changes were apparent in the position of the editors on

any of these subjects. Because of the financial difficulties of the period, however, some farmers insisted that it was more profitable to buy cows than to raise them, thus resurrecting a practice which had bothered John Skinner in 1820.³³ The editors opposed the idea and insisted that judicious selection of the best dairy cattle and breeding from them was the best way to improve a herd.

Editors Campaign for Herd Improvement

The chief problem encountered in this program continued to be that of identifying the best cattle. Even as late as 1896 much cow testing was done simply by weighing the milk, although most editors continued to insist that the Babcock test was more reliable.³⁴ On the whole, the farmers were no more willing to test their cows than before, and so the editors continued the campaign for cow testing. They insisted that knowing which cows were poor producers was especially important in time of economic distress. On the other hand, the depression made cow testing too expensive for many farmers.³⁵

Depression also conditioned the editorial approach to feeding problems. In the past, feeding questions had been handled on a national or very local basis, with only the most perfunctory acknowledgment of regional variations in climate and soils. After about 1895 the editors became more aware of local differences and ran articles like "An Oregon Ration" or "A Vermont Ration."³⁶ For the first time journalists met requests for feeding advice with answers based on feeds that could be grown in the correspondent's locality.

Before 1898, editorial interest in feeding centered on ensilage and sorghum. In both instances the aim of the editors seemed to be to insure an adequate feed supply in time of drought.³⁷ This concern was fair evidence of a western interest in dairying. One Mary Best of Medicine Lodge, Kansas, wrote of sorghum: "After ten years' experience, I have not found a superior or more economical feed for stock than these. As dry weather-resisting plants, and for the quality and quantity of feed produced per acre, the sweet sorghums stand without a rival—always excepting alfalfa."³⁸ Except for the emphasis on drought-resisting plants, the new periodicals offered no variation on customary feeding advice.

Nevertheless, editors did report some formal investigation of the nutritional elements in food and attempts to establish uniform rations. Full winter feeding gained a new prominence; some editors recommended silage, and some roots.³⁹

Editors Disagree with Scientists on Tuberculin Test

Shortly after the tuberculin test disclosed the prevalence of tuberculosis in American cattle, several scientists insisted that tuberculosis bacteria grew in silage. They therefore concluded that ensilage was dangerous.⁴⁰ The editors were generally contemptuous of this idea. As the Practical Dairyman and Agriculturist put it:

If some of our men of science will give the old cow a rest and let her eat her ensilage, while they investigate the source of water supply for human use, and examine into the purity of other foods that men consume, and advise them in regard to providing better ventilated homes, and especially sleeping rooms, and teach our city and village people how to cloth their children less fashionably and comfortably, they will do a far greater service to the people than they are doing by looking at ensilage through a microscope and trying to find a live microbe that may kill somebody....⁴¹

The editors also opposed the notion that the tuberculin test caused the disease.⁴²

In 1898 Chicago Produce carried one of the earliest editorials on the relation of flies to disease. In time the necessity of keeping flies out of creameries became one of the regular summer campaigns of the various editors, but in 1898 most journals emphasized other aspects of creamery management. The accent was still on cleanliness, although the specific problems had changed. Some editors emphasized the need for keeping milk cool while it was en route to the creamery, while others stressed the need for clean tubs in order to prevent moldy butter.⁴³

One farmer wrote to Hoard's Dairyman requesting information on the cause of stringy milk. He gave his feed ration for analysis as the probable cause. The editor bluntly told him that there was dirt in the milk; feed was not responsible.⁴⁴ Other journals carried articles on dirt and bacteria, and a few editors recommended pasteurization.⁴⁵ The editorial campaign for cleanliness and pasteurization increased in intensity but without any visible results. The new science of bacteriology was used to link dirt with microbes, microbes with disease, disease with spoiled products, and spoiled products with low prices. This clearly was an attempt to reduce the problem of cleanliness to cash values. Nevertheless, the low prices of the depression seemed to

make any extra efforts toward sanitation useless both for farmers and creamerymen.

After 1896, the editorial squabbles over tuberculosis gained momentum. Hoard vigorously defended the use of the tuberculin test as a means of discovering the disease in cattle, while Jenkins just as definitely asserted that the only sure test was an obviously sick cow. Hoard insisted that the disease be eradicated; Jenkins maintained that eradication meant senseless slaughter since the disease could not be transmitted to humans.⁴⁶ Other editors took sides as before, but mostly according to personal inclinations. As the Nebraska Dairyman saw it: "Some farmers are likely to be unduly alarmed at the presence of tuberculosis in cows all of which we believe is unnecessary. From pretty good authority it is stated that tuberculosis in milk will not be conveyed to the human system. We are not at liberty to use the authority's name, but suffice to say he is one who has treated cows for the disease and has had experience."⁴⁷ The authority was wrong, but by 1900 Hoard had come to about the same conclusion, although he still insisted that the disease was fatal to cattle and should be eliminated. In 1901 he led the journalists by demanding state payment for diseased and slaughtered cattle, so that eradication would not cause undue loss for the farmer.⁴⁸

The observation that not all bacteria were harmful encouraged the use of starters in butter making. Even as early as 1896, however, some journalists considered starters to be a species of adulteration.⁴⁹ Harmless bacteria were therefore proscribed on the grounds of adulteration, as were other impure additions to butter. Adulterants were numerous and often the result of unintentional carelessness. As one editor raged:

Some ungodly, depraved, filth monger, who pretends to be a butter maker, brings to town and puts on the market occasionally some reeking, polluted, abominal compound which looks worse than rancid margarine, and tastes like the settlings of soured dishwater. It has the meliflous [*sic*] aroma of the cow stable, and the consistency of soft soap, and is held together by numerous cow hairs of various lengths and colors. Our merchants should spot the people who sell such rank accretions as butter, and discontinue to purchase their products. Any careful person can make pure, sweet, beautifully grained, good flavored, wholesome butter in this country, and there is no excuse for any other kind.⁵⁰

In this age of sharp business practice, efforts to sell adulterants were often audacious. Chicago Dairy Produce exposed one such attempt in 1898:

Dairy Velvet.

The above is the very enticing name given by a Kansas City manufacturer to glucose, which he is endeavoring to sell Kansas creamerymen at about 1-1/2¢ per pound to use in the adulteration of their butter. In sending out the letter this manufacturer says:

Gentlemen: We send you by mail a sample of Dairy Velvet, a corn product which is pure and perfectly neutral. It can be mixed with butter in the proportion of 10 to 20 per cent according to the weather and stock in which it is mixed. It does not deteriorate the butter in any way being neutral instead of imparting a flavor to the butter it receives the flavor of the butter and becomes immediately amalgamated with and not distinguishable from the butter itself. And added to these good qualities it carries with it the element of a big profit which is worthy of your attention and investigation.⁵¹

The editor was outraged. He informed creamerymen that use of the adulterant could lead to confiscation of the guilty creameries.⁵²

Meanwhile, filled cheese, or what the editors often called "lard cheese," began to attract attention. This product was made of skim milk with vegetable or animal oils added, and was universally condemned by the editors. In the minds of the journalists, filled cheese and oleomargarine were practically the same; both were frauds.⁵³ In 1896, in announcing new legislative action against the two substitutes, Hoard connected both products with continuing depression: "The defenses are being strengthened all around the line, and when prosperous times come again the dairy industry will be in a position to take full advantage of them, without paying tribute to the oleo and filled cheese combine."⁵⁴ Hoard recognized that the only reason the frauds found a good market was because reduced consumer income prevented the public from buying high quality products.

Editors Quarrel on Process Butter

In spite of a general agreement on adulterants, the editors quarreled among themselves on the question of "process" butter. This product was formed by mixing and reworking various grades and flavors of butter, which were

then sold either as pure creamery butter or sometimes as "process" butter. The technique employed dated back at least to John Skinner in 1830. Some merchants' journals supported process butter on the ground that it was better than oleomargarine, while the creamery journals opposed it on the ground that it encouraged the use of oleomargarine, since the differences in quality were not as great as the differences in price.⁵⁵

The continuing growth of city population, plus the new prosperity, caused an urban increase in the consumption of fluid milk and cream. More and more notice was taken by the editors of the quality of this milk. Bitter milk was attributed variously to bacteria and bitter cattle feed.⁵⁶ The editors suggested the use of both the science of bacteriology and old dairy lore. In 1900 for example, Hoard proposed that hot water and salt peter be mixed with bad tasting milk, and the milk then be separated. In making this suggestion he copied a technique advocated by John Skinner sixty years before. Hoard also argued for sterilization of milk bottles used in city milk delivery.⁵⁷ In this case he was considerably in advance of his fellow journalists.

The general problem of pure food continued to be connected with oleomargarine. As before, the editors harped on the subject of restricting oleomargarine, and indeed, the subject appeared in all journals in great volume from 1896 to 1901.⁵⁸ Oleomargarine manufacturers consistently attempted to have the Supreme Court of the United States destroy the various local laws regulating manufacture and sale of the substitute. The attempts were unsuccessful, as the dairy press joyfully reported.⁵⁹ The second important movement was in the direction of national antioleomargarine legislation. This law, the Grout Bill, was vigorously supported from 1900 until its enactment in 1902.⁶⁰ In other respects, the oleomargarine-butter wrangle remained about where it had been. No new ideas or arguments were presented on either side.

The details of creamery building continued to be one of the more important subjects for both farm and trade journals. The editors invariably advised that the creamery be built on a hill, if possible, so that the milk could flow by gravity from one process to another. It was also suggested that the creamery be located near a spring so that there would always be an abundant supply of water. Water was essential for pasteurization, although the process was not yet in common use. The editors predicted, however, that it soon

would be and that creameries should be in a position to install the necessary equipment.⁶¹ They could not unless they had a plentiful supply of water. A new departure in creamery building was mentioned in 1898 when the hollow brick came into prominence. Kimball of the Creamery Journal explained: "Isolation from the outside air is impossible if the creamery building is a mere shell. It is well known that dead air spaces are the best thermal insulators. Building hollow walls of materials which do not conduct the sun heat rapidly to the interior of the creamery, or radiate the artificial heat in the creamery . . . is an idea which has persistently suggested itself to those planning the erection of model creameries, but there have ever been mechanical difficulties in the way. The invention of the "hollow brick" promises to be a great boon to the creamery industry."⁶² The editor then went on to recommend the new idea. He also supported the farm separator system, although the idea did not seem to take hold very quickly. A more common variation from separating at the creamery was the skimming station where the farmer took his milk, had it separated, and returned home with the skim milk while the cream was sent by rail to the creamery.⁶³ Thus one creamery could serve a very wide area. This extensive coverage by a single creamery was necessary in places where dairying was only a sideline to beef feeding. It was especially prevalent in Kansas, Nebraska, and parts of Iowa and provided the base for dairying in those states.

The new western dairy journals all had one characteristic in common. Regional or state pride expressed itself in local items, appeal for settlers from other states, articles comparing the new dairy regions with the old, and even occasional laudatory poems of a nondairying sort:⁶⁴

Autumn time an' harvest time,
Up in Minnesoty;
Harvest time an' autumn time
Up in South Dakoty.
Wheat all cut an' stacked away,
Barns crammed full of fragrant hay—
What's the matter, anyway,
With Minnesoty,
Ur South Dakoty? ⁶⁵

Another characteristic of the younger journals was the collection of bits of dairying advice, frequently under some title as "Dairy Maxims." These short paragraphs ran the

gamut of dairy lore and information. Because of their brevity and conciseness they may well have had more influence on the farmers than any other feature in the paper. The short paragraphs suggested the general limits of information presented by the newer periodicals, and expressed the chief ideas or programs of the editors. A few examples may serve as typical:

In nearly all cases the men who make the most money in dairying are those that are the most liberal feeders. In a majority of cases dairymen can purchase feed bran and oil meal to an advantage.⁶⁶

Dairying has a moral side. It requires regular habits. It requires a man to be at home at milking time; home is the best place on earth. The successful dairyman is not a loafer or drunkard. Cow culture is educating and elevating if intelligently followed.⁶⁷

"Goose flesh," on the back of the cow as she stands shivering in the stall, is a sure sign of a goose in the comfortable sitting room figuring out the "nit profits" in farm dairying.⁶⁸

Progressive farmers are showing an increasing respect for the silo. Better provide one on your farm.⁶⁹

The editors emphasized care and feeding of cattle and were as eager as other dairy journalists to demonstrate the superiority of dairying over other branches of agriculture.

Proof of the superiority of dairying was variously seen in the fact that dairymen were paid once each month, that they were less disturbed by drought, that their steady income destroyed the money lender, and that dairying restored soil fertility.⁷⁰ Editors generally combined all economic problems and frequently handled discussions of wages, marketing, prices, economic theory, and reform in one lump.

Claim Advertisers Control Editors

The approach an editor took on economic problems depended partly on the place of publication but even more on the general financial situation. In any particular year the journals showed a surprising unanimity in approach to economic problems. Changes in editorial attitudes between 1897 and 1898 were also evident. In 1897, for example, the Creamery Gazette attacked the alleged machinations of

Elgin merchants. In turn, the Elgin Dairy Report defended the Board of Trade but attacked New York milk monopolists. These attacks ceased in 1898.⁷¹ In 1897 there were complaints against the too persuasive tactics of advertisers toward editors, combined with queries like: "ARE PRICES TO KEEP DROPPING?"⁷² The journalists also showed a sudden new interest in the question of pay for creamery and cheese factory employees. Surprisingly enough, editors suggested higher wages.⁷³ By 1898 the arguments for higher wages had become more compelling and persuasive, indicating increased prosperity.

In 1898 editors also demanded the better use of skim milk, since in time of depression skim milk was practically valueless.⁷⁴ Another evidence of business prosperity was the lack of attacks on middlemen. In 1899, Kimball even took up their defense, which would have been impossible as little as two years before. As he complained:

The evils of the contract business are spreading. It is becoming quite common for creameries to sell half their output through a commission house and the other half to a retail store on contract based on New York quotations.

.....

And a new feature is developing. Creameries that have heretofore put all their butter up in sixty-pound tubs are now printing part of the make. This is sold on contract, and the price obtained is about two cents above quotations....

Our readers can see to what serious straits this is reducing the commission trade. The commission business has developed the butter business of the United States, and now the very business fostered and made prosperous by it is turning around to butcher the very agency which built it up.⁷⁵

In 1899 the New York Produce Review and American Creamery gloated over high butter prices. By 1901 the reformer was characterized as "a pessimist and fanatic who is an agitator and disturber...."⁷⁶

The new journals reflected similar changes in editorial attitudes as the nation moved from depression to prosperity. In 1897 the St. Paul Dairy Reporter accused the Minneapolis Board of Trade of fraud and deception. In 1898 the same journal, still concerned about markets, pointed out the value of the Alaskan butter trade, which clearly

indicated a depressed butter market.⁷⁷ By November, 1898, the contents of dairy journals suggested that prosperity was returning. Jensen's Dairyman noted the improved prices for butter, while other editors emphasized the New York market as well as the relatively obscure markets of China, Japan, and South America.⁷⁸ Thus between 1897 and 1899 the dairy journalists progressed from quarrels about local trade to enthusiasm about world commerce and expanding markets.

The new prosperity also gave impetus to the demand for pure food laws, since the industry was in a position to take advantage of them. The breakdown of rugged free enterprise was not uncommon during the depression, and the dairy industry was as eager as any other to obtain government assistance. In line with the campaign for greater government supervision of competitors, the editors reported more and more local laws against oleomargarine, associated foul or "preserved" dairy products with the poisoned meat of the Spanish-American War, and in general attacked producers and distributors of dirty or adulterated milk, cheese and butter.⁷⁹

Controversy over Babcock Flares Anew

Meanwhile, controversy over the Babcock test continued.⁸⁰ By 1899, the Jersey Bulletin had moderated its stand somewhat, but Jenkins still insisted that the test was not a butter test. He explained: "We are well aware that thousands are using the Babcock in testing milk; and that the Jersey breed has been benefited by its use, no one knows better than the editor of THE JERSEY BULLETIN. No dairy breed has been advanced in popularity to the degree that the Jersey has been by the use of the Babcock on her milk. But it is a misrepresentation to apply the test to a lot of milk and call the process a butter-test; and a man who will do it must surely be short-sighted, demented or crooked."⁸¹ While Jenkins opposed the Babcock test as a substitute for testing by churn, other editors supported the test for determining payment for milk by cheese factories. The journals also carried various articles or regular columns on cheese making, which in addition to the customary advice, gave directions for making cheese on the farm or manufacturing foreign styles of cheese.⁸²

In breeding, the old quarrels between Holstein and Jersey breeders continued, as did those between general- and special-purpose advocates. Hoard continued to insist that

dairymen use dairy cattle, while H. C. Wallace, of the Creamery Gazette, castigated what he called "The Wisconsin Idea."⁸³ Wallace claimed that Western farmers had been severely injured by a too ready acceptance of the dairy-purpose idea.⁸⁴ In contrast to Wallace, T. A. Borman, of the Kansas Dairy Farmer, asserted that: "Everywhere the general purpose cow has proven a failure in the dairy, and the Kansas cow will be no exception to the rule. Steer dairying does not pay in older states and we cannot hope to see it pay in Kansas. The wise farmer will gather about him a herd of special purpose cows and keep in the front ranks of successful dairying."⁸⁵ In 1900, Dairy Age also contradicted Wallace's Farmer on the same subject.⁸⁶ Clearly western opinion was by no means unanimous. The new western journals did argue that farmers should not buy cows but rather raise them, but if they bought, to be careful in their purchases: "The best way to select a dairy cow is to get one that will give milk. The best way to find out how much and what kind of milk the cow gives is to weigh the milk and test it with the Babcock test. The best time to do this is before you buy the cow."⁸⁷ The Babcock test continued to be recommended as a good way to find out whether cows produced milk or water.⁸⁸ As before, editors could not agree on the best type of dairy cattle, while farmers largely ignored suggestions that cows be tested.

The western dairy periodicals, like many new ventures of the past, faced short subscription lists and what appeared to be farmer resistance to book learning. The editors attacked the problem by sending out free copies to farmers and by suggesting that creamerymen establish libraries of dairy periodicals.⁸⁹ Efforts to induce farmers to subscribe by this method were not very effective, however, as Dairy and Creamery sorrowfully observed.⁹⁰

Although formal education did not greatly interest the newer journals, Dairy Age opposed teaching agriculture in schools on the ground that there were too few competent teachers and that the curriculum was already too crowded.⁹¹ This novel attitude was to reappear later and more frequently.

Journalistic disputes also recurred with both old and new papers entering the interpublication quarrels. Some of the editorials of the period were choice bits of ironic invective, while at least one offered an inside view of dairy journalism as practiced in the 1890's. All of the editorials had one characteristic in common. They were much longer than in

any previous period. The editors had no more to say than before, but they said it at greater length.

Jenkins continued to oppose any innovation and consequently was in the middle of every controversy. He was particularly disposed to attack artificial butter coloring because he held its use to be immoral. He also attributed all the oleomargarine trouble to color. He was quite willing to argue with any editor on the subject, and with the increase in the number of periodicals he had more than Hoard to oppose. The Practical Dairyman and American Stockman was particularly caustic, if a bit long-winded:

Bro. Jenkins of the Jersey Bulletin—dear soul—has had another relapse. A good vermifuge would help Bro. Jenkins. Jersey milk is too rich for him, it plays the deuce with his “innards,” intellectually and physically. It is only once in a while that Bro. Jenkins wakes up, but when he does he has the nightmare worse than when he is asleep. Our sympathies go out to him, and we hope for his early restoration to an “abnormal” condition of some kind. Any sort of change from the original creation will be good. In the meantime our dear brother is advised to keep quiet as possible and dilute his Jersey milk one-half. This is the way his disease has attacked him this time. He quotes from the Practical Dairyman:

“There is an advocacy in certain quarters of legislation to prevent the artificial coloring of butter, and some advocates profess to believe that the movement is gaining such strength that such legislation will ultimately come. The opinion reminds us of the man’s mule. He said the animal would stick his head in an empty flour barrel and bray, and think it was talking to the whole universe.”—Alleged Dairy Paper.

“Alleged Dairy Paper” is one of Bro. Jenkins’ originalities which accounts for its particular brilliancy. Nothing, in the way of intellectual scintillation, is equal to this, except perhaps spelling God with a lower-case “g.” But this does not end Bro. Jenkins’ exhibition of sparkling mental action. He sticks his head in the flour barrel and comments thus upon the quotation from the “alleged dairy paper:”

“There are some heads that won’t go into flour barrels, but calling names doesn’t prove anything. The movement referred to should ultimately come,

whether it does or not. But it can scarcely expect the support of a paper that refers to scrub cows as "excellent" and is afraid to tell its readers which of two breeds of cows has been proven best for the dairy. But there must be a wonderful fellow feeling in the ability to read a mule's mind."

Bro. Jenkins modestly—he is the soul of modesty—states that an agricultural paper says "he knows more about dairy cows than he has ever told." That must be true, because we cannot conceive that anybody can know as little as he tells. But when Bro. Jenkins is well he is real cute—cute as a little Jersey. When he has an attack of "color-morbus," however, nobody can tell what is coming. But whatever it may be, it will be as brilliant as frosted pumpkin in the moonlight. It is impossible for us to determine whether our special liking for our esteemed brother, is on account of his own splendid self, or because of the splendid cow he champions. They are so closely associated that you cannot tell which has the horns.—Editor.⁹²

The rather good humor of the attack was matched by H. C. Wallace when he thanked the creamery press for help during the summer of 1896. He also explained how the papers were operated:

Some time since the editor of the Gazette felt that a year of hard and continuous work entitled him to at least a half rest during June, and he inserted an advertisement like the following:

WANTED—During the hot months, a creamery paper that has now and then an article worth clipping.

The advertisement was read by our esteemed contemporaries and there was a visible effort on the part of most of them to help us out in a fraternal manner. They seemed to recognize the justice of our appeal. For a year the Gazette had been furnishing them most of their heavy editorial matter as well as hundreds of short articles which they could work over as original, and the fairness of our request seemed to appeal to them. The Dairy World woke up and we were able to find several articles in its next issue which we thought worthy of a place in the Gazette, as well as a number of short notes which suggested ideas to us. Hoard's Dairyman excelled itself

and furnished several columns for us. Chicago Produce, whether intentionally or not, reduced its space on mottles and the Chicago market to nineteen columns, thus making room for a couple of articles of general interest which we promptly sent to the printer. The N.Y. Produce Review was of considerable help, while the Western Creamery did its full share. Even the Creamery Journal seemed to be touched with the spirit of brotherly love and got out an article on dairy schools, which while we could not reproduce it, gave us an opportunity to touch up Bro. Kimball in the most approved manner and this did us as much good as a week's vacation.⁹³

In 1898 Kimball returned the compliment with perhaps more bite when he remarked of the failing journal: "The Creamery Gazette has resumed publication on the strength of having secured an advertisement for Ripans Tabules."⁹⁴

Although the editors were quick to assail one another, they were not outspoken about governmental affairs. Now and then they expressed a political opinion, but always with great caution. The Spanish-American War was no exception to the general attitude. The Kansas Dairyman casually mentioned the war under the regular column of "Kansas Items of Interest," with the remark that: "In the case of a long war Uncle Sam will find that while Kansas is not very thirsty for war, Kansas will be one state where he will not be under the necessity of drafting his own nephews."⁹⁵ Hoard approached the subject more directly, although his mind immediately wandered:

HOARD'S DAIRYMAN has not, heretofore, referred to the pending hostilities between the United States and Spain, largely for the reason that it has not believed that it is its province to engage in discussion of such subjects. Its office force, in all departments, has been keenly alive to all the phases of the question, and is not without a full quota of representatives already on the tented field in the service of the government; but, so far as the paper is concerned, it must hold its course, and continue to counsel its readers not to forget the cow and all that makes for her comfort, and to the increase of profit from her. In these days of market excitement, and sudden demand for cereals and meat, there will be great temptation to forsake the quieter and safer paths of dairying, forgetful of the fact that dairy products are quite slow to decline in price, as they are to respond to a temporary

excitement. It is already manifest that there is to be a decided falling off in butter and cheese in many parts of the country, and there is, therefore, every reason to expect that those who do not lose faith in the cow, and exhibit this "faith" by proper "works" will not fail of suitable reward.⁹⁶

Later journalists would have been puzzled at the manifest restraint of the editorial, although the mixing of dairy philosophy and war comments was common enough during subsequent wars.

The Creamery Journal went to the other extreme and requested opinions from various merchants and creamerymen on Admiral Dewey, Americans, and Spaniards. The correspondents described Dewey as one of the greatest admirals of modern times, certainly superior to Nelson, and one writer asserted that the hero of Manila was as "decisive as Farragut, tenacious as Grant, humane as Lincoln. A success unequalled in history." Advertisements for books on Hawaii and the Philippines began to appear in June, 1898, and by October there was some mention of the butter tariff in Puerto Rico.⁹⁷

The assassination of McKinley at the Pan-American Exposition in Buffalo was also mentioned in the dairy press. The chief result seemed to be that one editor relieved himself of a few antforeigner sentiments. Assassins, anarchists, and immigrants were linked in one group and soundly denounced. The protest of the New York Produce Review and American Creamery was the first overt attack on free immigration in the dairy press, although it was by no means the last.⁹⁸

The last years of the depression exhibited some curious contrasts in dairy techniques. The farmers tended toward, and the editors often condoned, lapses into old methods or ideas which were at variance with scientific discoveries or the possibilities of the new technology. The old and almost forgotten complaint of the Grangers was dragged out, while home manufacture was encouraged.

The beginning of prosperity brought back a certain sauciness to the editorial columns and a fairly vigorous defense of the economic system as it had been. In 1896 Kimball had given evidence of being a free silver advocate; by 1899 he vigorously supported the middleman, and he was only one of many. The journalists' demands for government aid, however, left a residue of depression programs in their

minds. Moreover, the attitude that the government should do something about economic problems remained near the surface, even though the editors returned to a defense of free enterprise and all its works.

Chapter 8 - New Competition for the Older Journals 1901-1905

Nine New Journals Appear

Dairy journalism was less hazardous after the return of prosperity. A gradual increase in the number of dairy farmers, the successful operation of more creameries and cheese factories, and increased advertising from more prosperous manufacturers and merchants all tempted would-be editors to envision possible revenue. Some prospective editors believed that the journals already in existence could be greatly improved, and in support of this belief there seemed to be some popular dissatisfaction with the various older papers.

Altogether nine new journals were begun between 1901 and 1905. Two, the Jersey Advocate and Dairyman, of New York, and the Holstein-Friesian World, of Ithaca, were intended for breeders. The other new journals, with the exception of the Ice Cream Trade Journal, of New York, all entered in direct competition with existing periodicals. Previously many journals had been begun to fill a gap or cover a new field of dairying, but after 1901 the new journals directly challenged older papers. Kimball's Dairy Farmer (Iowa), the Western Farmer and Dairyman (Minnesota), the Live Stock and Dairy Journal (California), Cheese and Dairy Journal (Wisconsin), the Western Poultry and Dairy Journal (Nebraska), and the Dairy Market Reporter (Wisconsin) complete the list of new periodicals.

The Columbian Exposition, the Spanish-American War, and other events seem to have intensified American craving for higher cultural achievements. This development, seen in other areas of American life, was reflected in some of the dairy journals.¹ Formerly, new journals had been

pressed for material and had included articles on almost any subject. Subject matter continued to be diverse, but the diversity usually resulted from a conscious effort to raise the literary quality of the new magazines.

Lack Better Literary Style

For example, the first challenger of the old order, the Jersey Advocate and Dairyman, announced that it was "a weekly paper devoted primarily to advancing the interests of Jerseys and the dairyman, but also a family magazine adapted to country life."² Edited by Valancy Fuller, it appeared April 10, 1901, at New York as a rival of the Jersey Bulletin. Some Jersey breeders apparently found Jenkins too uncouth, for as Fuller explained: "A stock company, organized under the laws of the State of New York, with a capital of ten thousand dollars, has been chartered to publish an up-to-date weekly stock paper and family magazine. The capital stock of the company is in the hands of leading Jersey breeders" ³ The amount of money invested was enormous when compared to the \$350 with which Jenkins had begun his venture in 1883. This large expenditure indicated that the breeders meant business, that the paper was to succeed, and that Jenkins was to be supplanted if possible. The identification of the stock owners showed that some breeders were not on friendly terms with the Jersey Bulletin. The emphasis on the family magazine indicated they thought the literary quality of the older journal was somewhat inferior.

An emphasis on high literary standards was also proposed in the lead editorial of the Holstein-Friesian World. On January 1, 1904, this journal started in opposition to the Holstein-Friesian Register.⁴ The editors, C. G. Brown and E. M. Hastings, began their venture at Ithaca, New York, with the customary claim of publishing an up-to-date breed paper. Like Fuller of the Jersey Advocate, however, they emphasized literary content.⁵ Brown and Hastings wrote of their new journal: "It will contain much matter that will be interesting to the dairyman, and to the general farmer, but especially will it attempt to adapt itself to the needs of the breeder's, the dairyman's and the farmer's home circle. Its literary department will be carefully edited, and will contain the best and brightest that can be procured."⁶

The resolve to publish literary-breed magazines apparently put considerable strain on the several editors, who not only clipped and pasted high toned articles, but who also

composed much of the material which appeared in the journals.⁷ The material ranged from inspirational poems to appeals for advertisers, often in strange conjunction. Brown of the Holstein-Friesian World was apparently responsible for one of these odd juxtapositions:

New occasions teach new duties,
Time makes ancient good uncouth;
They must upward still and onward,
Who would keep abreast of truth.

—Lowell

.....
I held it truth, with him who sings,
To one clear harp in diverse tones,
That men may rise on stepping-stones,
Of their dead selves to higher things.

—Tennyson

.....
Would you succeed, not into bankruptcy be hurled,
Then advertise your stock in THE HOLSTEIN-
FRIESIAN WORLD.

—Shakespeare.⁸

Fuller of the Jersey Advocate did not try his hand at poetry, although he made some fair selections. He tended toward the ironic in his choices and toward verbosity in composition. Brown was possibly the more qualified of the two editors for the work of literary composition. In 1904, for example, he ran an article on the similarities and differences between Burns and Whittier. "The world owns few names more deeply loved or highly revered than those of Burns and Whittier. Much alike in many things, differing widely in a few, yet each holding so warm a place in human affections, it seems fitting that a comparative view of these poets be taken, and some of their most striking likenesses and differences briefly noted."⁹ In September, 1905, Brown began to run a serial entitled Conscript of 1813, "Translated from the French by the editor of the H.-F. World."¹⁰

The Jersey Advocate and Dairyman failed in 1902.¹¹ In 1905 Hastings left the Holstein-Friesian World. Some time around 1914 Brown sold a half interest in the paper to M. Prescott and Hastings.¹²

In addition to strictly literary endeavors, the editors of the newer journals also inclined toward learned scientific articles. In the early eighties the term "survival of the fittest" had been used as a defense for the scrub cow. By

1901, however, the breed enthusiasts had discovered, as had many others in various lines of endeavor, that Darwinian logic could be applied to any side of a question. Fuller, therefore, made use of the slogan as an argument for the Jersey cow because she was most fit for the dairy.¹³

The editors of the new breed papers differed from their competitors not only in literary pretensions but in approach to various dairy questions. Nevertheless, Fuller and Jenkins agreed that the use of artificial color was undesirable. As the Jersey Advocate saw it: "Believing that dairymen should be consistent, we will advocate abolishing all butter-color in the making of butter and cheese. Its use is a 'fad' of no practical value."¹⁴ In contrast to the stand of the Bulletin on the Babcock test, the Jersey Advocate supported it on the ground that "it is manifestly impossible that every cow in the herd can be tested from time to time by the churn, for the purpose of ascertaining the yearly yield of each cow in the herd."¹⁵ Like Jenkins, however, Fuller left the impression that the only real test was the churn, and that only practical difficulties prevented its use in testing.

The new breed journals were only partly successful in supplanting the older papers. The Jersey Bulletin outlasted its rival, while the Holstein-Friesian World eventually absorbed the Register.¹⁶ The World subsequently became one of the most conservative magazines in the list of dairy periodicals.

The return of agricultural prosperity brought with it a group of farm dairy papers to challenge the supremacy of Hoard's Dairyman, the Dairy World, the American Dairyman, and a host of lesser farm papers. Of the several new journals, the first of any importance was Kimball's Dairy Farmer, founded in 1903 by Fred C. Kimball. The new journal was successful from the first, and at one time surpassed Hoard's in circulation.¹⁷ Possibly the clearest explanation for the new attempt was provided by a correspondent whose letter Kimball incorporated in an editorial: "A friend in Kansas in a letter about KIMBALL'S DAIRY FARMER says: 'The dairy farmer of the west for his improvement must have a primer—not a sixth reader like Hoard's. He must have a paper which he can understand, and covering the whole range of dairy farming, instructing him in the selection of the cow, her feed and care, the rearing of the calf, the proper use of skim-milk, the feeding of the pig, the planting and the cultivation of the best and cheapest feeds, etc., etc. I lived, until the past few years, among these things,

and can't get away from the thoughts of them.' "¹⁸ There was some truth to the charge that Hoard's Dairyman was no longer a primer. Hoard had grown noticeably tired of answering the same old questions and writing the same old editorials, and was now and then abrupt with beginning dairymen.¹⁹

Farmer reaction to Kimball's Dairy Farmer is difficult to determine, but certainly the older papers were affected by the journal. The publishers of Hoard's Dairyman were made aware of their new competition, and the Dairy World and the Western Farmer and Dairyman, which both failed in 1906, and the American Dairyman, which ended in 1907, may have been damaged by the new competition.²⁰

As early as 1902 Thompson of the Dairy World complained of the machinations of a secret enemy whom he did not name. His remarks seemed to indicate, however, that even before Kimball appeared with his new paper, the Dairy World was in trouble:

Ever and anon there appears on the surface of gossip some report purporting to be authentic and informing the hearers that The Dairy World is on the journalistic market for sale. It is impossible to determine when, where or how or by whom such "diaphanous fairy tales" originate, but originate somewhere they do, and as a result either a letter comes or someone drops into the office or someone waylays the publisher . . . to arrange for possible terms. We endeavor . . . to get at the bottom of such reports and . . . about all of them seem to originate in the fertile brains of an unscrupulous, crafty and venomous enemy.²¹

Whatever the virtues of the claim, the competition of Hoard and Kimball contributed to the failure of the paper in 1906.²² In 1904 Kimball died, but his paper managed to live until 1929, when it was consolidated with Successful Farming.²³ Between 1904 and 1910, in addition to helping cause the failure of several papers, Kimball's Dairy Farmer also absorbed the Dairy Gazette and Dairy and Creamery.

Another challenger of the old order in dairy-farm papers was the Western Farmer and Dairyman, first published at Mankato, Minnesota, on April 1, 1905.²⁴ The Western Farmer and Dairyman preached the twin doctrines of salvation by dairying and by diversified farming. The editor, W. W. P. McConnell, established his principles, his methods, and his need for subscribers in one editorial:

The Western Farmer and Dairyman is published in the very heart of one of the best farming districts in the world. The publishers will leave nothing undone in making this paper the peer of any of its kind in the country. They will do experiment work in all kinds of agriculture and live stock on the Western Farmer and Dairyman's farm near this city and report, not theoretical results, but actual farm experiments, made under farm conditions. We need your help and sympathy in this work. We fully realize that we can only make this enterprise a success, by getting close to the interest of diversified farming upon which all prosperity of our country rests. We therefore solicit your co-operation; we shall be glad to have any news items pertaining to the farm and dairy. In taking a firm stand for the farmer and his interests, we feel that we are behind the great interests upon which our prosperity and advancement must rest. We want and need your subscription. Co-operation will be our motto and as your interests and ours are mutual we hope that it will be your pleasure to show your appreciation of our efforts by becoming a subscriber to the Western Farmer and Dairyman. Attend to it at once and secure the paper from the start.²⁵

The publishers obviously meant to offer practical dairy information. At the same time the journal lived up to its promise of diversification by covering every subject from "ANTS IN LAWNS," to "REAL DOGS OF WAR."²⁶ The competition of Kimball's Dairy Farmer and Hoard's Dairyman apparently proved too great. The Western Farmer and Dairyman died in 1906.²⁷

On the Pacific Coast, the Live Stock and Dairy Journal challenged the Dairy and Produce Review of San Francisco. The newspaper, edited by Henry Hawson, began at Fresno in 1903, appeared monthly, and cost one dollar a year.²⁸ Like Saylor of the Dairy and Produce Review, Hawson attempted to cover all branches of the dairy industry. The Live Stock and Dairy Journal exhibited more concern for the city milk consumer than did the Dairy and Produce Review.²⁹ Hawson lectured his readers on the need for clean milk and urged the use of pasteurization. He also informed milk dealers that it was no substitute for cleanliness:

There are numerous requests for information on sterilization and pasteurization and a general tendency toward

improvement in handling milk for the city trade, but the nature of the inquiries also indicates that the questioner has but little, if any, knowledge, practical or theoretical, and that the necessities of business are forcing him into dairy paths where he is likely to go astray. Pasteurization is but one of the means to an end, a help towards increased purity and cleanliness in milk and an aid to the dealer in that it stops for a time the process of decomposition that commences as soon as the milk is taken from the udder.

Pasteurization is and can be made a powerful aid to the milk handler, but it is not a method that can be applied indiscriminately to all kinds and qualities of milk and by all classes of milkmen.³⁰

Contend with In-and-out Dairymen

The remarks on "the necessities of business" which forced stockmen "into dairy paths" indicated that dairying was still an emergency side line. Under such circumstances the quality of dairy products was not likely to be high. Nevertheless, the editor pointed out that the producer was not the only one responsible for filthy milk.

In November, 1903, Hawson praised the Fresno board of health for forcing cleanliness on the milk suppliers.³¹ The preoccupation of the editor with this campaign was a bit unusual. No other paper of the time showed much interest in the subject which was, on the whole, unpopular with farmers and distributors.³² The editor also boldly entered the fight against the spread of infectious disease, and in so doing took another potentially unpopular stand.³³ As the editor remarked in 1903: "The live stock owner should know the importance of eradicating infectious diseases without being forced to do so, and we believe the time has arrived when the cattlemen of California can be depended upon to cordially co-operate with the authorities in this work."³⁴

In 1904 Charles Blemer replaced Hawson as editor of the Live Stock and Dairy Journal. As a result, the editorials were more tactful, although they were by no means conciliatory.³⁵ In 1905, for example, Blemer wrote:

In taking up the question of tuberculosis among live stock we want to say to our readers and to the stockmen of this and every other state, that we are not doing this as a means of making news or creating excitement, it is not our purpose to further the enactment of any laws,

rules or regulations looking to the wholesale testing or destruction of tuberculosis cattle. We want you to thoroughly understand that we are, at all times, working in your behalf, we want you to realize that this disease of tuberculosis is very widespread, that it affects, or is liable to infect, the live stock owned by you, we want you to know that it will spread from one animal to another, resulting in untold loss to you, and above all we want you to understand that if you will let us we will help you to eradicate it from your herd and prevent its reintroduction. We fully realize that there has been so much written, so much said, so much done that has resulted in the confusion of stockman and dairyman regarding this disease. We know that arbitrary laws have been enacted, and in too many instances enforced, that resulted in needless, wanton destruction of live stock, causing great losses to stock owners; we know that the majority of the stockmen and dairymen have been wrought up to that stage of feeling that they want nothing more to do with live stock sanitary laws relative to this disease. A very good friend of ours . . . said to us: . . . "Let it strictly alone, it will get you into trouble." We want to say to the stockmen and dairymen that we cannot afford to let it alone, and that you cannot afford to do so; already it has been let alone until it has spread among our herds to an alarming extent and you cannot afford to let it go any farther.³⁶

Apparently there was no severe competition between the Live Stock and Dairy Journal and the Pacific Dairy Review. Although their subject matter overlapped, there was enough difference to prevent serious conflict. The Pacific Dairy Review tended to concentrate on processing and distributing information. The Live Stock and Dairy Journal, on the other hand, carried more general livestock information, and devoted a larger part of its space to farm problems. It ceased publication in 1916.³⁷

In contrast to the farm-dairy journals, the technical journals encountered little new competition between 1901 and 1905. Of the several ventures into trade journalism, only one periodical left any important record of its existence.³⁸

The Cheese and Dairy Journal founded in January, 1904, and edited by G. W. Rankin, announced that it was "published monthly by the CHEESE AND DAIRY PUBLISHING COMPANY of Whitewater, Wisconsin. Subscription \$1.50 a year

in advance."³⁹ The editor began his journal in apparent ignorance of the American Cheesemaker and the Dairy Record, for he wrote: "The Cheese and Dairy Journal is blazing a new trail, it is covering a new field. The fields of agriculture, stock raising and butter-making have been pretty thoroughly covered by periodicals devoted to their respective interests, but no journal, that we are aware of, has been published in the interest of the cheese industry. This industry is a great and rapidly growing one and is not only deserving of a journal devoted exclusively to its interests but is extensive enough to amply support a paper of its own."⁴⁰

Issue First Foreign Language Dairy Journal

The final phrase demonstrated an error in judgment, since it soon appeared that the cheese interests were either unwilling or unable to support the new journal. In July, 1904, the journal issued a section in German of about four pages, edited by Carl Marty, and included in the periodical proper. This was the first foreign language dairy journal in the United States.⁴¹ In June, 1905, the journal changed title to the Cheese and Dairy Journal and Creamery Reporter. As the editor observed: "The publishers, after careful consideration, have determined to annex the new field at the earnest solicitation of numerous Wisconsin creamerymen."⁴² The paper failed in September, 1906.⁴³

The Cheese and Dairy Journal never managed to be anything except a local paper. Rankin seems to have been convinced that Wisconsin was the only cheese producing state in the union and that a cheese paper did not really have to circulate outside the state. The paper was devoted almost exclusively to local problems, especially the establishment of cheese factory inspection.⁴⁴ In 1904 the editor remarked: "With an inspection law on the statute books like that proposed, Wisconsin dairy products would increase in price everywhere even before there is any marked improvement in the quality of the product, because of the good reputation that would come to Wisconsin and the advertising it would afford. It might not be at all unlikely that the increase in price of Wisconsin dairy products the first year from this cause alone would more than pay for the fifty instructors. Where can the Wisconsin dairyman make any easier money than this?"⁴⁵ In contrast, the American Cheesemaker approached the problems of cheese factory inspection from a national viewpoint.⁴⁶

Aside from the Cheese and Dairy Journal, the only other

technical paper of any significance to appear between 1901 and 1905 was the Ice Cream Trade Journal. Begun at New York in 1905 by Thomas D. Cutler and Edward C. Williams, the paper offered technical and economic advice to its particular industry but did not compete with other journals.⁴⁷ It is still in existence.

The old and new journals had much in common. Although the dairy papers were not addicted to muckraking or trust denouncing, they could not avoid one of the main themes of the times. Editors wrote on a great variety of subjects from the conspiracy of the salt trust to the need for keeping western forest reserves intact.⁴⁸ Rankin of the failing Cheese and Dairy Journal and Creamery Reporter mingled farmer coöperation, the evils of competition, and a pro-labor sentiment in one single outburst. He was particularly caustic on the waste of capitalism:

Take for instance the enormous waste of wealth in the insurance business of the country. It takes three dollars of expense to administer one dollar of benefits to the policyholder. The farmer and the working classes bear this enormous burden. Another great source of waste is the advertising business of the country, in which between six and seven hundred millions of dollars is spent annually. A large part of this vast amount is a social cost, or waste, because it is employed in diverting trade from one man to another, that is, in business war.

Then there is real war, or the preparation for it, in our present military expenditures. We ought not to be expending \$265,000,000 a year for war, and only \$225,000,000 for education—\$225,000,000 to put brains into the people and \$265,000,000 to blow them out! This tremendous expenditure for war falls like all other waste most heavily upon the farmer. He bears the burden in the increased price of things he must buy and in the decreased price of his labor product. Let us cut these large expenditures on our army and navy; it is only the big capitalists who need the army and navy to force open new fields of trade and to suppress protesting workers.⁴⁹

Obviously, any journal which expressed these ideas would be failing. The comments on advertising were particularly self-destructive.

Subordinate Interests of Producers

In general, however, the trade journals concentrated on

specific problems of marketing which were often associated with oleomargarine competition. In 1902 Chicago Dairy Produce warned that oleomargarine manufacturers might buy butter, force up the price, and thus assure a market for their substitute. Later the same year the editor warned that an increase in price for producers would cut America out of the export trade. In 1903 Knight observed a relationship between falling oleomargarine sales and rising butter consumption. He attributed this to low butter prices, among other things.⁵⁰ In every instance, the trade editors tended to subordinate the interests of the producer to those of the merchant and consumer. Willson of the Elgin Dairy Report warned producers that the consumer dictated the quality of products:

There seems to be a disposition among buttermakers and creamerymen to set up a standard of quality in their own mind and work to that end. They do not take into account that the final test of the quality of their goods must come from the persons who consume them. The ultimate judge of butter is the man who decides whether it is suitable or not, or whether it is desirable. It takes a good deal of time and money to educate the consumers along any particular line, especially if they have a prejudice in some other directions. So in the butter trade it is best to relieve ones mind of any prejudice he may have, and find out what the consumer likes best; and furnish it to him in that particular shape and style.⁵¹

The advice was some distance in concept from the later journalistic demand that the producers advertise and change consumer ideas.

While the trade papers asserted the importance of the merchant and consumer, the farm journals sought to improve producer income by wise marketing. Some editors still proposed home dairying, while others suggested that coöperative creameries offered better profits to farmers. Around 1904, the threat of the centralizer creamery attracted editorial attention. The centralizer, so-called, was generally located in a city. It collected cream by rail from the surrounding areas, produced butter in large quantities, paid higher prices than country creameries, and threatened the cream supply of small local plants.⁵² The additional high price offered by centralizers struck most of the editors as another attempt to monopolize a business by driving out small competitors. The editors also charged that the

centralizer would take any quality of cream and was thus encouraging filthy dairy practices. The end result would be poor butter and an increased consumption of oleomargarine.⁵³ The problem was merely suggested in 1904, but it was to become increasingly important as the century wore on. The hitherto individualistic and competitive dairy industry was indeed threatened with control by a few large companies. The editors did what they could to halt the process.

Since the centralizer paid for the transportation of the milk, it was necessary for the competing local creameries to meet this service. They solved the problem by sending out wagons to collect cream from the farmers, although creamerymen were never pleased with the arrangement. The Dairy Record explained in justification of the service.

It is a consoling fact, however, that the majority of those creameries which are sending out wagons are doing so through necessity, rather than choice. A neighboring creamery, or perhaps an agent for a centralizing plant starts out a wagon in your territory, and you are compelled to do likewise in order to hold your business. Self preservation is the first law of Nature, and you cannot be blamed for maintaining the patronage at your creamery, even at the expense of stultifying your ideas as to what is best for the creamery as a whole.⁵⁴

Other ideas on transportation were also handled by the editors, ranging from wider tires on wagons to mention of the new automobile, fueled by alcohol. The railroads were criticized as usual. The Dairy World charged that railroad discrimination against Chicago in cheese transportation rates had reappeared in a new guise. "They could not raise the rates to Chicago dealers, so they raised the classification, which virtually raised the rates 100 per cent." In contrast to this complaint, in 1903 Chicago Dairy Produce (which only a few years before had protested against railroad discrimination) praised the roads for the work they performed in opening new territory for dairying.⁵⁵

The merchant papers were particularly interested in the development of new dairy territories. Chicago Dairy Produce and the Elgin Dairy Report ran a fair number of such diverse items as "Experiments in Siberia," "South Dakota Report," or "The Dairy in the South."⁵⁶ While these reports indicated some expansion of the industry, on the whole, there was no great extension of dairying in the United States. The reports of expansion, however, showed clearly enough

what the merchants hoped for. More dairy products would mean lower prices at wholesale and probably no reduction at retail. The merchant aim of buying cheap and selling dear was one source of conflict between farm and trade journals.

There was little conflict, however, on technical problems, and some progress was made in the methods of processing dairy products. Although the use of artificial butter color was widespread, some editors and farmers still resisted the idea.⁵⁷ On the other hand, the development of dry powdered milk as a regular commodity and the discovery of the action of lactic sugar in milk were noted and approved by the dairy journals. The editors also gave the histories of, and directions for making, foreign cheeses like Limburger and Camembert.⁵⁸

Cold Curing Cheese Praised by Press

The cold curing of cheese, however, was the most important development of the period. Before 1897 cheesemakers had usually assumed that cheese had to be cured at temperatures of 60 to 70 degrees, but H. L. Russell and S. M. Babcock of the Wisconsin Experiment Station demonstrated that cheese cured at 25 to 30 degrees kept better and had a finer flavor. The dairy press publicized the discovery in 1903.⁵⁹ The new process was gradually accepted by cheesemakers and resulted, when used, in lower losses through spoilage and higher prices due to better quality.

As before, the editors campaigned for cleanliness. The probable ineffectiveness of the journalistic program can be judged by the advice given. Farmers were still urged not to wet their fingers with milk before milking. But the farmer was no longer the sole butt of editorial attacks. The creamerymen were also directed to clean up. As Knight observed: "There are some things we do not like to see in a creamery. They are as follows: Dirt, dust, greasy engines, oily separators, churns with black grease on the ends, rubbish in the corner, worn out brushes and brooms lying around, rusty vats, rusty butter tryers, a slovenly butter-maker, and a poor buttermaker. These things have no place in any creamery; they would make better fertilizers and filling for some slough hole."⁶⁰ The Cheese and Dairy Journal even reversed the usual editorial form, and suggested that cleanliness should begin in the factory, since the farmer could not be clean if he was given dirty cans or took home rotten whey.⁶¹ The editors also drew attention to the relatively new problem of moldy butter. The Elgin Dairy

Report noted: "It is suggested, that since the use of parchment paper for tub lining, mold has been much more in evidence, than previous to the extensive use of parchment liners, that possibly there may be some cause found in the parchment paper, that the germs are in the paper, and when the right conditions prevail, dampness, and the right temperature, mold developes."⁶² The outbreaks were later shown to be seasonal and subsequently became one of the more persistant problems for later dairy editors.⁶³ Cleanliness was also associated with microbes and disease. The editors carefully pointed out that milk was one of the best media discovered for the growth of germs. The journalists continued to recommend pasteurization and in one instance suggested boric acid be used in place of salt as a preservative.⁶⁴

Editors also insisted on maintaining high quality in cheese. The use of starters had been discouraged in butter making, but editors still believed cheese could not be made without some bacteriological action. This belief gave rise to the complaint of the American Cheesemaker that many of the cultures were impure and often gave cheese unwanted flavors.⁶⁵ Apparently the defect was remedied, since the complaint did not recur. The use of adulterants still plagued the industry. In 1902 the Dairy World denounced one of the more nauseating frauds: "The newest butter fraud is innocently called a 'butter help,' " says an exchange. This adulterant has been discovered in Indiana. This 'help' is Irish moss. It 'helps the fat and water to coalesce and form a solid.' It looks and smells like butter, contains about 40 per cent of water and is shipped from Chicago to whomsoever in barrels."⁶⁶ Thompson characterized the stuff as glue for butter and opposed its use.

Antioleomargarine Legislation Passed

The most important new development in control of adulterations, was the passage of the Grout Bill in June, 1902. This law required a \$600 oleomargarine manufacturer's license, a ten-cent a pound tax for colored oleomargarine, and a tax of one-fourth of a cent on the uncolored product.⁶⁷ Before the bill passed it caused considerable editorial uproar. Knight, of Chicago Dairy Produce, and Hoard, of Hoard's Dairyman, lobbied in Congress for some sort of restrictive legislation, but their efforts, while eventually successful, were not always appreciated by their journalistic competitors. For a while it seemed that the dairy industry

would have to accept a substitute bill with less stringent provisions. The Dairy World, in particular, denounced Hoard and Knight for abandoning the Grout Bill and advocating a substitute.⁶⁸ Nevertheless, the Grout Bill became law, and Thompson was silenced for the moment. The journalistic campaign which had been under way since 1880 had at last succeeded, and almost by the efforts of journalists alone. In fact, antioleomargarine legislation can, with no exaggeration, be considered the personal achievement of the dairy editors.

Opinions on the effectiveness of the law varied. Kimball's Dairy Farmer felt the law was working well, since the price of butter had risen. Knight observed a four-cent a pound rise in the price of butter but also noted that consumption of oleo increased in spite of the tax.⁶⁹ Oleomargarine manufacturers immediately tested the validity of the law in the courts, an action which indicated that the law had some nuisance value. The courts, however, upheld the legislation, as the editors gleefully reported.

Once the law was well established by virtue of court decisions, the oleomargarine manufacturers strove for its repeal. This they did every session of congress from 1902 until 1950, when they finally succeeded. In a bid for popular sympathy, they made the customary claims of providing a cheap fat for the poor and also sought to obtain the backing of the stock raisers by asserting that repressive legislation injured the steer market.⁷⁰ For their part, the editors argued that the Grout Bill had been intended merely to halt fraud, and that it injured no one except the manufacturer who wanted to sell oleomargarine as butter.

On the matter of breeds there was little change from the past. The discussion over raising versus buying cows still took up some space, while the editorial campaign for cow testing continued. Only by testing could the farmer identify the poor cows, and further, one editor remarked: "Only the rich can afford to keep poor cows, and they don't, and the poorer a man is the better his few cows should be if he is to make a living. To see a poor man keeping poor cows is a sight to make one sigh at the short sightedness of man."⁷¹ Jenkins came more to the point. Of the unprofitable cow he said: "Give her an eternal rest."⁷²

Support for Dual-Purpose Cow Continues

The dual-purpose cow also received her usual amount of attention. Thompson of the Dairy World challenged the other

editors when he asked: "What is a Dual Purpose Cow?"

The above is the type of cow that, through the persistent advocacy of certain dairy writers has been stigmatized as a myth, a delusion and a snare. For a time they succeeded so far in neutralizing the dual quality by the use of dairy sires by that section of the farmers who listened to their much fair speech, that this magnificent type of animal was threatened with annihilation. It will take long years to undo the mischief. The advocates of annihilation as the highest end of the dual purpose cow were doubtless sincere in the line of advocacy which they thrust upon the farmers with a persistency worthy of a better cause, hence, charity bids us try and cover up their mistake, lest generations yet unborn point the finger at their want of good judgment from an evolving future. Some of those advocates were otherwise magnificent men. But this makes their mistake all the more inexplicable.⁷³

The obverse of the argument was once again pithily stated, this time by the New York Produce Review and American Creamery: "One should imagine that experience should have shown, by this time, the impossibility of creating and maintaining the exact desired balance in the two qualities for more than a generation or two."⁷⁴ Experience in breeding was not always reliable, however. In 1904, Valancey Fuller, judging from his and others' experience, wrote with confidence that "the habits and characteristics of animals which have been developed by their environments or by man, are transmitted with the same regularity as the habits of the ancestors from whom they sprung."⁷⁵ Milk giving was therefore deduced to be partly a matter of inherited characteristics and partly a matter of acquired but transmitted habits. Thus a cow of good habits could presumably give birth to others like her. Fuller, of course, thought the Jersey had the best habits of all.

The dispute over the value of the various breeds continued as before, except that the general dairy papers were more inclined to oppose the extreme positions of the breed journals.⁷⁶ The dairy press as a whole observed that specialized breeds were often weak. As the Nebraska Dairyman noted: "A great deal is being written about an 'air' cure for milk fever. The cure is no doubt a good one and should be used. The average dairyman will have no trouble with milk fever. The scrub cow of the western dairy does not contract milk

fever. The trouble is nearly always found in the pure bred herds of heavy milking cows."⁷⁷ Even the Holstein-Friesian World admitted the truth of this observation in an article telling how to prevent the disease.⁷⁸

Milk fever was only one of the areas of veterinary medicine where progress was evident. About 1902 abortion was proved to be contagious, and it was positively asserted on the best scientific evidence that bovine and human tuberculosis were the same and were transferable. The facts of tuberculosis transmission were, therefore, no longer open to dispute, although solutions to the various problems of eradication were. There was even mention of tuberculosis vaccination. Vaccination, as subsequent editors discovered, served merely to spread the disease.⁷⁹

Spreading Knowledge a Difficult Task

Meanwhile, editors continued to complain that spreading knowledge was a difficult task. It was variously estimated that one out of four, or one out of two, farmers subscribed to a farm paper.⁸⁰ Even then the number who read was undetermined but presumed to be fewer than the number of subscribers.

The editors were universally puzzled by farmer resistance to subscription appeals, since the cost of any publication was ridiculously low.⁸¹ Apparently some ethnic influences were operative, since the editor of Chicago Dairy Produce discovered that German farmers read more than did the Yankees, but there were too few Germans. Thompson indirectly suggested that one of the impediments to wide circulation was that the journals were not always accurate. Perhaps, as one editor hinted in an article on "The Improvement of Rural Schools," part of the circulation trouble arose from the quality of grade-school instruction.⁸²

Other educational media, such as the local fair, were barely mentioned in the dairy press between 1901 and 1905, although the larger expositions still attracted attention. Editorial interest was not, however, comparable to that which had accompanied the Columbian Exposition. The Pan-American Exposition "Model Dairy" was mentioned in 1901, but editors were more interested in the St. Louis World's Fair of 1904.⁸³ The events at St. Louis were well publicized, but nevertheless, only the Jersey Bulletin was truly enthusiastic. Jenkins gloated over the performance of the Jersey cattle, but the editors in general paid very little attention to the cow tests. Thompson insisted that Jenkins was arrogant and

the test inconclusive, and Hoard still doubted Jersey claims; but otherwise the editors were chiefly interested in apparatus and machinery.⁸⁴ Perhaps the clearest comment on the fair and on the dairy journalists was made by Willson, of the Elgin Dairy Report. He summed up the year 1904 in this vein: "There has been no great or wonderful thing happened in the dairy industry for the past year, with the possible exception of the display of butter sculpture at the St. Louis Exposition. This was a phenomenal exhibition, of which the dairy industry can be proud, and the originators of this exhibition may well be proud of their work. But along the lines of the development and growth of the dairy industry, there has been nothing specially new, or of universal interest."⁸⁵ As far as the industry was concerned, the introduction of the ice cream cone at the St. Louis fair was probably one of the more significant events of 1904. The invention went unnoticed by the editors.

By 1905 several new dairy developments had occurred, not only in technology, but in journalistic ideas as well. The striving for higher quality literary magazines and the questioning of untrammelled capitalism were both important developments. Eventually, these ideas faded into insignificance as conscious programs, but they added spice to the period and did something to elevate the general literary standards of dairy journals as well as alter the common editorial ultraconservative approach to economic problems.

Furthermore, the discovery of the cold curing of cheese, the passage of the Grout Bill, and the definite establishment of the relation between bovine and human tuberculosis were no mean accomplishments. The continued life of several of the journals and the demise of others were also significant. The competitive struggle made the established journals more aware of their responsibilities and less complacent about their weaknesses in presenting the news. As a result of the experience of 1901 to 1905 none of the established papers had much difficulty in riding out the next great wave of journals. Between 1906 and 1909 fifteen new journals were founded, but not one of them lived beyond 1918.

Chapter 9 - Local Dairy Journals 1906-1909

Increase in Dairying Brings New Journals

The abrupt rise and decline of Western dairying during the depression of the 1890's was followed by the slow development of dairying in various parts of the country. Between 1900 and 1910 sudden increases in the population of widely separated cities offered markets in places where dairying had formerly been only an incidental occupation. Between 1900 and 1910 the population of Chicago increased 28.7 per cent to a total of 2,185,283, while Denver advanced 59.4 per cent to a total of 213,381. Detroit rose from 285,704 to 465,766, an increase of 63 per cent, while Cleveland went from 381,768 to 560,663, an increase of 46.9 per cent.¹ The population of Minneapolis and St. Paul increased 48.7 and 31.7 per cent respectively, making a combined total of 516,152 in 1910.²

These expanding centers with their metropolitan areas depended on the surrounding countryside for butter and fluid milk. Moreover, greater prosperity increased the per capita demand for dairy products. As a consequence, the number of farmers who kept some dairy cows increased considerably in states such as Minnesota, Iowa, Missouri, Wisconsin, Michigan, Illinois, and Ohio.³ This increase in the number of dairy farmers was paralleled in the same regions by an increase in the average number of cows kept.⁴ There were, in short, a greater number of dairymen, and these kept more cows. On the whole, this movement was conditioned by local markets, as partly indicated by the nature and location of the new dairy journals.

Altogether, fifteen journals were founded in the period 1906-9, and with only three exceptions, all sought to serve local interests. The confidence with which the editors entered the field indicated that many of them knew little

about the dangers of local dairy journalism. The relatively swift increase of dairying in certain regions deluded new editors with prospects of success. As it happened, most of the editors were unable to meet the challenge of the older journals. Only a particularly alert editor could keep his subscribers after they discovered Hoard's Dairyman.

New Editors Overlook Competition

In 1906 Heatwole's Dairy Paper was begun in Northfield, Minnesota, on what seemed to be a base of permanent dairy interest. The journal appeared monthly, edited by W. F. Schilling.⁵ The proposed range of subjects might have brought the journal into conflict with the Dairy Record, but there was, in fact, little competition between the two. In spite of extravagant editorial promises, Heatwole's Dairy Paper became a farm journal. Perhaps the editor misjudged the nature of his competition, for his first editorial ignored competitors like Hoard's Dairyman or Kimball's Dairy Farmer: "Heatwole's Dairy Paper will give its entire efforts to the dairy interests alone and will aim to voice the sentiment of the dairy farmer, the butter and cheese maker and also the dairy student. Already this paper has the assurance of hearty cooperation and support from the leading authors of dairy literature in the Northwest. . . ."⁶ The editor often strove to give Minnesota an aura of national importance, but the journal itself did not claim wide circulation.¹⁷

The tentative nature of the farmer shift toward dairying was suggested in an article by E. K. Slater, when he noted that "the Northwestern cow keeper is not a dairyman in the true sense of the term."⁸ Instead, the farmer practiced diversified farming but kept cattle to maintain soil fertility and tended toward dairying because it was more profitable than beef raising.⁹

In March, 1908, the paper was changed to the Minnesota Dairyman, because "it was desired to take from this paper any appearance of pure personal interest and widen its scope and influence."¹⁰ The change did not have the desired effect. Actually, the paper claimed a wider influence under the old title, since the name Minnesota Dairyman was obviously more parochial, as the publishers realized in 1914 when the name was changed again. "The Minnesota Dairyman, which has been serving the dairy interests of Minnesota since 1906, changes its name with this issue to Northwest Dairyman. This change of name is made to more truly fit the field it is now covering, i.e., Minnesota, North Dakota, South Dakota

and Montana.”¹¹ The Northwest Dairyman ceased publication in 1918.¹²

The next important dairy journal, The Milk Man, founded in Kansas City, Missouri, in 1908, was specifically linked to the fluid milk market. Edited by Dr. L. Champlain, it appeared monthly with a subscription price of one dollar a year.¹³ The editor was fairly explicit in his statement of what the paper was not, as well as what it was.

It is not a dairy paper like other dairy papers. It is a milk paper and will print nothing that is not of importance to the milk business. If one wants a paper that talks butter, cheese, farming, chicken raising, incubators, love, garden fruit, anecdotes, etc., there are such papers. They are usually called by some name that suggests cows and their products, and indeed, they are generally good and well worth their price to him who wants general reading. What we are trying to say is this: The Milk Man is not that kind of paper, cannot fill the place of such a paper and desires to avoid being substituted for such a paper. The Milk Man is for milk men and for no one else....¹⁴

The magazine devoted itself to the problems of the milk processor and distributor, with particular emphasis on pure milk legislation.¹⁵ The editor was criticized by various readers for the quality and contents of his journal. His editorial reply is one of the masterpieces of dairy journalism. He clearly stated the principles of the profession, the techniques employed, and the aims to be accomplished. His remarks gave precise expression to the editorial objectives of the period.

Don't forget that there are others who know less, perhaps than you. Try to remember, too, that all men do not know exactly the same things— that one person may know things that another does not, and vice-versa—that what might be so familiar to you that no explanation would be needed would not be intelligible to another reader unless explained in a simple way—that the bit of information that you may catch at as something sought for may be so old to another that to read it would seem like a waste of his time—that all men are not equally bright and have not had the same literary education—that it is sometimes necessary to say “maggot” instead of larva or “dung” instead of excrement—that it is necessary at

times to define for the benefit of some persons words that are well understood by most readers—that long and tedious explanations of technical things are at times avoided by the use of statements that are not in every respect correct—that The Milk Man, a printed instrument for public education, goes to all kinds of men with all kinds of interests—that the person who is afraid of a complete publication of facts is not likely to be well prepared to meet them—that the time and thought given to deception would pay better if devoted to the production of the real article—that the acknowledgment of a bad system gives hope for a better one—that Progress goes slowly enough and that men get behind if they don't keep up.¹⁶

The paper ceased publication in April, 1910.¹⁷ There were already two milk dealer papers in the field, one for the east and one for the west. The venture at Kansas City, Missouri, seemed superfluous.

Found Paper to Back Centralizers

In Minnesota, the semimonthly Northwestern Dairyman was established at St. Paul on October 31, 1908.¹⁸ As T. T. Bacheller, editor and publisher of the new journal, saw it: "We come impressed with the idea that we have a mission to fulfill, and that we can fill a place where there has thus far been at least a partial vacancy."¹⁹ The remainder of the editorial was not explicit, but in later editorials the editor asserted that there were entirely too many journals supporting coöperative creameries.²⁰ In 1908 Bacheller declared: "Evidence multiplies to the effect that one of the most important factors in building up the dairy interests of the Northwest, enriching the farmer and making him independent is the central buyer of hand separator cream. It may need 'precept upon precept, line upon line,' to really show up the vast advantages of this indispensable system, but evidence is abundant and logical."²¹ Except for complaints about coöperative creameries and an occasional attack on oleomargarine, the paper was almost entirely composed of lifted articles.²² The fight against the coöperatives had one strong argument. Coöperatives were indeed hard pressed in areas where there was little dairying; but as dairying became more widespread, coöperatives prospered. Since the Northwestern Dairyman was local in nature and since it was founded in support of centralizers, it was

doomed unless the coöperative movement should fail. Coöperatives increased in numbers and financial power, and the Northwestern Dairyman died on June 1, 1911.²³

Regional interest in dairying, fostered by the growth of a metropolis, also conditioned the appearance of the next local dairy paper. The Dairy Bulletin first appeared at Macedonia, Ohio, in April, 1909, edited by A. S. Neale. The editor, unlike his predecessors, boldly claimed a limited circulation. At the same time Neale indicated that the Cleveland market was chiefly responsible for the origin of his journal.²⁴ He explained that:

The issuance of "The Dairy Bulletin" is, we believe, something entirely new in agricultural publications. Namely, the local farm paper.

There are a great many problems in each section of a local nature, that must be worked out for that particular section.

.....
 style="padding-left: 40px;">The farmers' institute, agricultural society, or club, has been the principal local educator, but we believe that a powerful auxiliary along this line may be had in the local agricultural paper, where all these home problems may be brought up and discussed. The Dairy Bulletin will endeavor to help solve some of the problems of the man who produces milk and sells it on the Cleveland Market.²⁵

The Dairy Bulletin was published by the Northern Ohio Milk Producers' Association and was almost entirely concerned with maintaining high and stable milk prices in Cleveland. As one editorial motto bravely proclaimed: "Twelve Cents from May 1st, and No Surrender."²⁶ Much of the difficulty in price wars and falling prices was attributed to dishonest dealers in Cleveland. The editor claimed:

There is a certain class of milk dealers in the city who are wholly irresponsible and dishonest. They buy from one producer until they are indebted to him for a large sum, then go to another point, buy from some other man and so on. Their aim is to beat as many people as possible. Hardly a man who has been shipping milk for a number of years but has not lost from one to several hundred dollars, and the total annual loss of the dairy farmers of this section runs away up into the thousands of dollars. Almost as much money is lost by price cutting and the attendant demoralizing market. These

dishonest men are the price cutters. Never expecting to pay in full for their milk, they can hawk it about on the streets and undersell their honest competitors. This sort of competition is disastrous to the honest dealer, who is willing to pay a fair price for the milk, and keep retail prices to a point at which all concerned can live.²⁷

There was no indication that the price of fluid milk held at twelve cents from May to October, and apparently crooked dealers still existed in Cleveland when the Dairy Bulletin failed in October, 1909.²⁸

Editors Foiled in Paper Shortage

Michigan had been a dairy state for some time. It was not until the twentieth century, however, that the decreased soil fertility of the lower counties, combined with the increased population of Detroit, Flint, and other cities to cause an increase of dairying in the state. In 1909 another local dairy paper, published at Detroit, appeared to capitalize on the new farmer interest. George Brownell of the Michigan Dairy Farmer explained: "The editors of this paper recognize that there are already many excellent publications in the field which devote their columns to the dairy interest and have a claim upon its good will. But there is none which devotes itself particularly to Michigan outside our own venture, and for that reason we look for very pleasant relations between ourselves and the Michigan dairy interest. We shall print a deal of news about what is going on, and we particularly invite correspondence from people who are interested in the business" ²⁹ The paper appeared weekly and cost fifty cents a year. In 1913 the journal changed to a semimonthly.³⁰ From 1909 to 1915 the paper increased circulation from 200 to 11,000. In 1915 the name was changed to Brownell's Dairy Farmer, "to keep pace with the widening of its circle of readers."³¹ The journal thus followed a course opposite to Heatwole's Dairy Paper, but with no greater success. In 1915 the editor confessed a shortage of capital and, in 1917, a shortage of paper.³² Brownell complained:

Directly in violation of its repeated promises, a print-paper manufacturing concern, that had agreed last November to supply this publication with a sufficient amount of paper, failed utterly to make good. The paper was not shipped until the middle of December, and then, as ill-luck would have it, the shipment ran into the Toledo

freight blockade where it was held until the middle of January, before being forwarded to Detroit.

.....

The situation in the Detroit paper market has been paralleled by that in no other city of this country. Detroit, during the past year, has been favored with a run of prosperity that has been the marvel of the industrial world. There are nearly a thousand large manufacturing concerns in this city that have shared in this prosperity and that have made extraordinary uses of "printers ink" to increase and perpetuate that prosperity. These concerns are keenly aware of the fact that paper is required in the production of printed matter and that, without printed matter, there would be a let up in their run of prosperity. So they have gone into the paper market and contracted for every pound of paper that was offered.

.....

My failure to cope with the present situation is due almost entirely to the fact that the dairy-paper can put up only a poor fight against a thousand manufacturing concerns struggling madly for more and continued prosperity. The dairy publication must simply take what print-paper these concerns don't want. It really isn't a case of putting up a fight; its a case of lying as flat as possible while the steam-roller runs over me.

However, I'm not going to quit. I am not going to give up publishing this paper just because I am having a little hard-luck just at this time. Within two or three years I look to see the tables turned. I believe the farming business... is bound to come into its own. I believe the future will see a padlock on the front door of many a present-day prosperity-mad manufacturing plant in Detroit.³³

But Brownell's Dairy Farmer ceased publication in April, 1917.³⁴

Adversity Kills Western Journals

A 59 per cent increase in the population of Denver undoubtedly influenced the rise of dairying in Colorado and led to the birth of the Colorado Dairyman, first published at Denver in March, 1909.³⁵ The journal exhibited the same general pattern of development as the previous journals. It was regional in nature and, like the Dairy Bulletin, was published by local milk producer associations. The Colorado

Dairyman, edited by B. G. D. Bishopp, appeared monthly, cost one dollar a year, and asserted that "‘the sole object of existence,’ of this publication is to advance the dairy industry."³⁶ The journal carried the usual assortment of articles on oleomargarine, cow testing, and breed discussions. Like many other local papers of the period, it carried few borrowed articles. The journal apparently ceased publication in May, 1915.³⁷ Like all of the local dairy journals, it was able to limp along without ever mounting to a national prominence, but the first breath of adversity killed it.

The only new journal which sought a national audience appeared in 1906, when the American Guernsey Cattle Club began the Guernsey Breeders’ Sale List and Bulletin.³⁸ It contained from twenty-four to thirty-six pages, all of which, except the first page, were occupied by advertisements. The textual matter was generally restricted to accounts of superior cows or histories of Guernsey herds.³⁹ Occasionally the editor wrote an editorial on the purpose of the Bulletin. One of these appeared in 1907.

The issue opens a new year with the publication of the monthly bulletin. In its new form it is just a yearling. In a way just passing from calthood to a period of greater usefulness. The recognition it has received has been encouraging. When it started it was not intended to compete in the field of journalism. The object was to bring those interested in Guernseys closer together. To promote a spirit of co-operation among breeders in extending the Guernsey field, and of creating a means of sending each month to the breeders and inquirers a reminder of the good qualities of the breed and also a list of persons who have stock for sale.⁴⁰

The Sale List and Bulletin apparently performed these limited functions well enough until its demise in 1910.⁴¹

Editors Engage in Greater Specialization

The outstanding characteristic of dairy journalism in the twentieth century was the general tendency toward greater specialization. The local dairy paper which was too highly specialized was just one manifestation of this widespread development. The older journals met the challenge of local as well as national competition by the development of the so-called "feature." Just as the general agricultural periodicals had broken their information into departments, giving rise to the dairy press, so dairy journals began a further

subdivision of information. As it happened, these divisions did not form the basis for new periodicals. Nevertheless, information was more readily available when collected in distinct categories, and the departments thus formed hampered the development of special and local papers. The regular column had been started some time previously, although it is not possible to say when. This device was most frequently used after about 1906. (Curiously, the number of such columns decreased after the first World War.) Regular columns and features included such titles as "CHAT ABOUT BUTTER," "PERSONAL MENTION," "OTHER PEOPLE'S WISDOM," "THE HOG," "BOOK REVIEW," "THE HOME CIRCLE," and "COMMUNICATIONS."⁴²

At the same time, competition from the literary journals, mentioned in the previous chapter, also affected the contents of the older journals. Reviews of technical books, although they were not very close to literary criticism, became more commonplace.⁴³ And there were those nondairy items which no longer appeared merely as filler for new journals. The Milk News of Chicago, for example, carried an article on: "ANOTHER SIDE TO TENNYSON—Story Illustrating Strange Phase of the Great Poet's Mentality."⁴⁴ At the same time the Western Farmer and Dairyman sported a bit of verse:

IN YE GARDEN

She walked within ye Garden
Among ye roses redde
Oh proude and haughtie was her mien,
And statelie was her Treade.

She walked within ye Garden
Among ye Lilies fair,
Her Eyes were fixed upon ye Earthe—
(O, Eyes like Jewels rare!)

She walked within ye Garden
Until I spyed her, when
I quickly chased her out; forsooth,
She was my Neighbor's Henne!

—New Idea Woman's Magazine.⁴⁵

The American Cheesemaker even devoted some space to a consideration of the nonresistance doctrine of Tolstoy.⁴⁶

Editors Debate Role of Education

Education as well as the fine arts continued to interest

the editors. Concern about learning probably stemmed from an assumed relationship between education and subscriptions to dairy journals. There was no unanimity on the subject, however, since each editor had his own notion of the educational background of his readers. Hoard asserted that farming schools were more valuable than universities,⁴⁷ while Brown, of the Holstein-Friesian World, insisted that on the contrary, agriculture should not be taught in public schools.⁴⁸ Hoard also openly asserted that there was a relationship between education and subscriptions to dairy periodicals. In a speech to the Illinois Farmers' Institute he pointed out that:

A farmer is just what his education has made him. The great mass of dairy farmers, although better organized than any other class of farmers pay scarcely any attention to the instruction and development of their minds. This is the last thing they provide for. They do the same by their children, and their fathers did the same by them. The poorest school in the world is the country district school, and the children have but little of that.

Not more than 65 per cent of all the farmers of Illinois who keep cows for profit read farm and dairy papers. What does this argue for the mental power of the whole to comprehend the problems of the business?⁴⁹

The Nebraska Dairyman introduced a touch of sarcasm to the discussion of education, referring particularly to farmers' institutes:

There is a moss-back farmer over at Eagle who doesn't believe in farmer's institutes. He had an article, from his brain, printed in the Eagle Beacon last week. He never attended an institute and don't have to be told by any man who wears a "fried shirt." As to growing alfalfa, he says, the farmers don't want to have anything to do with it for "skimming has to be done every time the stock break in and eat their fill." Right there, this "wise one" shows to what class he and others who know all there is to be learned about farming, belong. His fences are in such condition that they will not turn stock. We venture that his buildings are not painted and that he stores his machinery in the front yard, and if he owns a farm it belonged to his wife before he married her and that it is now encumbered with a mortgage. The man who is too smart to learn anything in regard to his business, no

matter what that business may be, needs a guardian to protect the welfare of his family.⁵⁰

The journalist's interest in education had shifted away from the college toward primary or high school education. Adult education was regarded as the special province of the farmers' institutes. This emphasis on the old style Lyceum contrasted greatly with former editorial attitudes.

As for the printed word, Hoard's claim that 65 per cent of the dairymen of Illinois read farm papers was an astonishing assertion even if overestimated by 10 or 20 per cent. Prosperity apparently reigned in the publishing business, as these figures would indicate. Furthermore, the editors did not complain of a shortage of subscribers or advertisers. The relative peace between journals was also indicative of good times.

Editors Support Technological Changes

In addition to education and circulation, the editors continued to be interested in technical innovations. Although many of the improvements were not strictly new, their successful application to dairying was. By 1906, for example, the stationary gasoline engine was coming into general use, supplanting the old steam engine in creameries. Consequently, several journals carried articles on how to run the machines.⁵¹ In 1909 the Creamery Journal noted the usefulness of the auto truck in collecting milk for creameries. The editor recommended the practice, primarily because it had been successfully employed in Michigan by one C. C. Lillie.⁵² There was to be some lapse of time, however, before the automobile replaced the horse in either creamery or city milk delivery.

Electric lights were not a new phenomenon, but the idea of using the creamery engines to generate electricity was. In 1908 the idea was recommended by J. H. Monrad in the New York Produce Review and American Creamery, with some examples cited from European experiments. Monrad warned, however, that service would have to be limited to a few users, since a creamery was not equipped to be a power station.⁵³ In subsequent years the editors urged the use of electric lights in creameries, and apparently in many instances the creamery used this form of illumination before it became otherwise common in the area.

Various technical journals also proposed particular dairy improvements such as the acidimeter test for cheese, the

mechanically refrigerated railroad car (an English invention), and the milking machine.⁵⁴ This last device had been in process of invention for about fifty years and was gradually being accepted as practical.⁵⁵ Like the invention of the centrifugal separator in the 1880's, the milking machine not only advanced the dairy industry but because of various styles and great competition, added to the advertising revenues of dairy periodicals.

Even as late as 1907, the chief editorial program continued to be "CLEANLINESS IS FIRST ALWAYS."⁵⁶ Farmers were told that when chunks of dirt had to be strained out of milk, it was more than probable that the fluid was contaminated. Buttermakers were warned to use pure water in working butter.⁵⁷ Shoemaker of the Creamery Journal even went to the extent of urging cleanliness everywhere. "No 'up-to-date' creamery operator will question the necessity of being clean physically, but there are quite a few, who are not quite sure that it is at all necessary to be clean mentally, to say nothing of moral purity."⁵⁸ The public at large ignored the question of personal morality, but consumers were determined to have pure dairy products. Consequently, various localities and states passed laws requiring such things as pasteurization of skim milk (to prevent the spread of tuberculosis among hogs, and thence to humans), and inspection of dairy farms to eliminate filthy practices. The dairy press castigated farmers and milk distributors for their vigorous opposition to these movements for public control.⁵⁹ On the other hand, some of the absurdities of urbanite pretensions were attacked. In 1907 the Creamery Journal recounted in verse:

"Where are you going, my pretty maid?"

"I'm going a-milking, sir," she said.

"Dear maiden, I'd like to disclose the fact,
That I'm an inspector under the Act.

"So pray remain, for I want to know
A thing or two before you go.

"Nay, pretty maiden, you must not weep;
How far away are the pigs you keep?

"And what percentage of butter-fat
Does your moo-cow yield? Pray tell me that.

"And how is the health of your pretty pet;
Has it anthrax, cancer, blackleg, garget?

"Has your sister measles or whooping cough;
Is the water clean in the drinking trough?

"I pray thee answer these questions of fact,
"For I'm an inspector under the Act.
"With the fierce bacilli also I cope
By means of my powerful microscope.
"Excuse me, I must examine your hand,
Purely official, you'll understand." ⁶⁰

In spite of valiant efforts, it appeared that local governments could not enforce pure food legislation; consequently, popular demand forced the passage of federal pure food laws. Nevertheless, as late as 1908 Chicago was unable to restrict the flow of tubercular infected milk into the city. ⁶¹

Editors Defy Noted Scientist

Robert Koch, discoverer of the tuberculosis microbe, complicated the control problem by insisting that bovine and human tuberculosis were not the same. The editors, however, did not intend to see their programs for eradication wrecked by a scientist. They carefully collected enough information successfully to contradict and defy Koch. ⁶² They were still left with the problem of a remedy, however, and it was not until 1910 that there was any coherent demand that the federal government compensate owners of infected cattle. ⁶³ In that year the Creamery Journal explained: "The average farmer believes in the tuberculin test and realizes the wrong in keeping tuberculosis animals, but he isn't philanthropic enough to sacrifice several fat hogs, steers or cows in order to check its spread. However, if he can be guaranteed against the loss of animals he will enter into testing with a willing co-operation." ⁶⁴ Thus urban demands for pure food led in the direction of further governmental action.

At the same time the range of editorial interest also widened as new uses for milk were discovered and as new sorts of adulterations were invented. The journalists advised farmers and processors on the care of milk in winter, the profits of home butter making, making desiccated milk, and ice cream manufacturing. ⁶⁵ Commission merchants were urged to pay premium prices for good butter, and creamerymen were told to make only the best product, even if it meant rejecting milk from some patrons. ⁶⁶ This last suggestion became increasingly frequent, a reiteration which was an almost certain sign that the advice was ignored by most creamery operators.

Combat Anti-Babcock Sentiment

Several of the old problems of dairy production still remained. Anti-Babcock arguments appeared from time to time, but on the whole, the test was accepted as a basis for buying milk for butter or cheesemaking. An occasional farmer even used the test to find out how his cows were producing.⁶⁷ Meanwhile, the dispute on the use of coloring still raged, with articles running the gamut from: "NOT A DECEPTION," to "Annato A Food,"⁶⁸ Most editors urged the use of coloring in butter and cheese, in spite of last ditch resistance, chiefly by Jersey breeders.⁶⁹

As before, the use of artificial butter coloring was closely connected with oleomargarine. In spite of the passage of the Grout Bill, oleomargarine consumption continued to increase, particularly in 1907. The manufacturers of the substitute made unremitting attempts to have repressive legislation removed. Increased consumption of oleomargarine and pressure for repeal of the Grout Bill merely enraged the dairy editors. Consequently, they devoted more space to oleomargarine than to any other subject. Apparently the manufacturers had not yet learned the advantages of selling the product on its own merits. As Shoemaker of the Creamery Journal explained: "If the oleo interests were fair; if their operations were always open and above-board; if they would actually try to sell oleo as oleo—offer it for what it is and sell it at whatever price they please so long as the seller knows what he is buying—the pure butter interests would have much less fear. But, so long as the oleo people insist and persist in attempting to palm off their product as butter; and, since there is no evidence that they will ever assume any other attitude, we may expect a lifelong fight."⁷⁰ As it happened, the length of the fight was misjudged. Hoard probably overstated the case, however, when he asserted that "the difficulty is, the butter interest is in many hands and not organized, whereas the oleo interest is in the hands of men of large capital and is well organized."⁷¹ The powerful lobbying done by butter men did not exhibit lack of organization. There may have been, however, lack of farmer support, since as early as 1907 the Creamery Journal complained of dairy farmers using oleomargarine.⁷²

Editors Supplied Canned Editorials

For their part, the oleomargarine interests used every trick imaginable to confound the butter industry. First they

secured secrecy on the internal revenue reports so that the editors could not tell how the law was acting, then they included packets of coloring matter with the product so that it could be colored at home.⁷³ They then tried to prove that collection of the federal tax cost more than was brought in, and topped the whole attack by sending out canned editorials to be printed in daily papers.⁷⁴ The final blow came with the charge that the country was in the grip of a butter trust. Organization there had been, aggressive business methods were not unknown, and the consolidation of creameries was common, but the trust charge was unbearable for the editors. One even suggested that butter be advertised to counteract the unfavorable propaganda.⁷⁵ The idea was novel and might well have been effective but was never well supported. Editors and dairymen had elected to fight along the line of restrictive legislation, even if the battle should take a lifetime and end in defeat.

Although the editors seldom had readers outside the industry, they continued to attack their one mutual enemy. Mindful of the observation that the devil cannot abide ridicule, editors struck out as best they could with sarcastic articles on petroleum butter or descriptions of oleomargarine.⁷⁶ One Howard Rann mixed his metaphors in a typical blast:

There is a big fuss made over the tax on oleomargarine, but you don't hear any roar over the tax which oleo puts on a weak stomach. The only man who can spread oleomargarine on a hot flapjack and retain it in his system is the one who has catarrh of the stomach so bad that he can't swell a 5 per cent dividend on his oil stock. There is nothing that will make the corpuscles of the blood look like a white poker chip quicker than the brand of oleomargarine which is three-fourths axel grease and one-fourth lobbered milk. The man who runs his teeth through a section of hip boot drawn from a carton of fresh oleo, will find his appetite fading away faster than the standpatters desert old Joe Cannon. All this talk about pure oleomargarine is pure piffle. Oleo that has been exposed to the air for twenty-four hours will make a robust stomach look like a display of openwork hosiery. We know a man 90 years old who had imbibed everything from lemon extract to wood alcohol, and when he tried to run a section of colored oleo through his system he cashed in so fast that he only had time to request the quartet to

sing "We shall Meet in the Butter Land" at the funeral. A man's inwards will stand a good deal of grief, but you can't give your stomach an oleomargarine shower bath three times a day without letting your clutch slip.⁷⁷

The butter industry was truly in a quandary. For twenty years the editors had attempted to secure legislation which would restrict oleomargarine, and when at length a law providing for restrictive taxation was secured, it was found to be ineffective, partly because it could not be made strong enough and partly because it was poorly enforced. While the editors fumed they cast about for a new solution to the problem of increased competition. They soon devised some effective arguments based on the nutritional value of butter, but for one reason or another, these arguments never seemed to go beyond the confines of the dairy world. In a pinch the editors paradoxically functioned well in the halls of Congress, but apparently had little influence with their public. Suggestions that the nutritional value of butter be presented to the public were almost never acted on by the dairymen.

Break Ranks in Support of Centralizers

The editors were unified in the face of the oleomargarine enemy but broke ranks on the question of coöperatives versus centralizers. First, the Northwestern Dairyman appeared as champion of the centralizers, and then other rather obscure papers took some shots at the coöperative. The Nebraska Dairyman viewed the progress of the coöperative with alarm: "We have not consulted the large creamery concerns as to what view they hold on this invasion as to what effect it may have on the industry, but we imagine it is going to result in creating considerable dissatisfaction and become an undesirable competitor in the field in the matter of marketing dairy products from the producer."⁷⁸ On the whole, however, the coöperatives received hearty editorial support. Sandholt of the Dairy Record noted that the railroads let centralizer cream stand for days before delivering it. He attributed the profits in the centralizer business to good times, since he could not believe that the poor butter resulting from cream of such quality could be sold in depressions.⁷⁹

In 1908, a correspondent of the Dairy Record noted that various country meetings were loaded with speakers in favor of centralizers and thought it a little strange that a

system should have to boost itself so much if it were really any good.⁸⁰ Heatwole's Dairy Paper openly challenged the Northwestern Dairyman by boldly asserting that the coöperatives made Minnesota famous and that the company financial reports were unclear compared to those of coöperatives.⁸¹ The most nearly balanced view of the whole problem was offered by the New York Produce Review and American Creamery, which decided that centralizers were prone to cheating and the coöperatives to squabbling.⁸² In this comparison, as in most, the edge was decidedly in favor of the coöperatives.

As would be expected, the centralizer-coöperative competition influenced techniques of farm management, particularly the question of separating cream on the farm. The centralizer naturally encouraged farm separation, because these creameries collected from great distances and transportation charges were lower on cream than on whole milk. Furthermore, the separator manufacturers wanted to sell as many hand separators as possible. Since advertisements for the machine afforded considerable revenue for farm papers, the editors could not be unfriendly toward the device. Hoard, for example, ran an article entitled "THE ADVANTAGE TO THE FARMER OF THE HAND SEPARATOR."⁸³ It should be noted that the local creamery also bought home-separated cream and that farmers generally preferred that system until markets were developed for fluid milk and powdered skim milk. Thus, technical advances in desiccating milk plus rising wages for urban workers and increases in the size of cities all contributed to the demise of the hand separator. In turn, the cessation of home separation meant the decline of the centralizer, which fell to economic change rather than editorial disapproval.

As any area turned more toward dairying, it was possible for coöperatives to drive the centralizer out, for as the editor of the New York Produce Review remarked in 1908: "Creamery booms are again in progress throughout several of the newer dairy sections of the middle west, and local companies are being formed and new buildings erected at a speed that reminds one of days gone by before the advent of the centralizer."⁸⁴ In the competition which resulted when coöperatives and centralizers clashed, the editors observed that butter quality was likely to suffer. As one correspondent remarked: "It has come to the place, friends, where the creamery manager is too busy trying to get the best of the other fellow to give enough attention to improvement of farm

methods or to educating the farmer."⁸⁵ Furthermore, competition tempted many creamerymen to adulterate their butter. Writing of the San Francisco area, in 1907, Saylor of the Pacific Dairy Review sadly contemplated the decline in morality:

Several of the butter merchants of this city were discussing the news item in last week's REVIEW, regarding the fining of Chicago butter merchants for violating the law by having butter in their possession containing too much moisture. Some of the local merchants in endeavoring to secure themselves to some extent against such trouble, some time ago mailed copies of the blanks issued by the Produce Exchange to their shippers requesting them to sign and return the same. As the blanks merely specified that the shipper signing them guarantees that the butter or cheese manufactured, packed, distributed or sold by him is not adulterated or misbranded within the meaning of the law, a person would naturally expect that every creamery or cheese factory operator would be willing to sign it. But the fact is—and it is not to the credit of any creamery aiming to do a legitimate business, that but an astonishing small number have shown a willingness to make such a declaration over their signature. Any disinterested person would naturally arrive at the conclusion that most of the creameries and cheese factory operators are not disinclined to violate the law if an opportunity is offered, or not to stand by a dealer whom they may get into trouble.⁸⁶

The tendency toward dishonesty was not, of course, confined to hard pressed creamerymen. Saylor also castigated sellers of worthless stock foods. And in 1909 MacVean of the Milk News protested the efforts of large-scale milk distributors to wipe out the small dealers by unfair tactics.⁸⁷

The editors continued to be concerned about marketing problems. On the one hand, the editors believed that dairymen and distributors had to have some profit and consequently butter prices could not fall to compete with oleomargarine. Instead, it was believed that "the consuming public more than anyone needs to be taught—must learn true value of dairy products as foods . . .," presumably so they would buy in spite of high butter prices.⁸⁸ On the other hand, profits, if excessive, gave the oleomargarine manufacturers another marketing advantage. Furthermore, as George Caven of Chicago Dairy Produce pointed out in 1908, the

public could not be easily educated to like inferior butter: "We have again seen prices reach a point where consumers quit buying and a decline became necessary. We have again had proof that consumers of butter want a good article and if they cannot get that they do not want any."⁸⁹ Other editors noted the same consumer reaction, which occurred even in times of unusual prosperity.⁹⁰ If it did nothing else, the oleomargarine competition forced the dairy industry to produce a higher quality butter than had generally been the custom.

In the field of marketing, the editors of the older papers were also quite aware of the extension of dairying into new regions. The Creamery Journal of Waterloo, Iowa, was particularly alert to the advance of dairying and looked favorably on the movement. As that paper reported in 1906: "Dairying in the Red River Valley is not something to come. It is here, and gaining and growing more rapidly than ever. Wheat was their old standby, but to depend upon it now is practically a lottery, and dairying is being forced upon the people in order to insure them of a continuous and fair profit from their farms. It is the only salvation for the wheat lands that have been cropped for the last 25 years. The people have been taking money out of the lands and putting nothing back to keep up the soil, never dreaming that the ground was losing its fertility."⁹¹ The editor also noted similar changes in South Dakota. By 1910 the value of dairy products surpassed the value of gold mined in the state.⁹²

The old arguments for diversification were brought up by various writers and speakers. Some authorities claimed that to maintain soil fertility all that was needed was a few head of cattle. On the other hand, C. W. Melick, writing in Kimball's Dairy Farmer, pointed out that dairying combined with pig or chicken raising required as many different talents as the average farmer could muster.⁹³ None of the editors seemed to grasp the fact that dairying appealed only when there were suitable markets near at hand; otherwise the trend was toward stock raising.

In most areas where dairying was profitable, hog raising was a common adjunct. Schilling of Heatwole's Dairy Paper observed: "One can hardly speak of dairying without saying something for the hog. If a dairyman is a patron of a creamery or has a hand separator he is missing a good thing if he does not keep a few swine."⁹⁴ Kimball's Dairy Farmer even went to the extent of carrying a regular feature entitled: "THE HOG."⁹⁵ Of course, the position of pigs in the dairy-

ing complex was only one of the aspects of dairy farming which the editors handled. Cropping practices also attracted some attention. In particular, alfalfa was frequently recommended as a substitute for corn.⁹⁶

Meanwhile, the disputes between breed enthusiasts continued about as violently as ever. In 1907 the Holstein-Friesian World noted: "The JERSEY BULLETIN of December 12 contains the following: 'A telegram from Shelbyville, Indiana, a few days ago read as follows: "Grieving over separation from his Jersey cow, Mathias Heller, 79, killed himself by hanging today."' Our only wonderment is that more Jersey breeders do not go and do likewise."⁹⁷ Although the general dairy publications could not indulge in similar wishful thinking, they could and did argue for more pure-bred stock on dairy farms. The old arguments of the weaknesses of dairy breeds were apparently forgotten as the journals joined the breed papers in advocating purebred stock. This temporary change contrasted with the previous editorial attitudes which had favored grades as a step in the right direction. The prevalent attitude, however, became similar to that of the Live Stock and Dairy Journal: "Cut out the 'grade' idea, for it implies scrubism. Stick to the pure bred idea, for it promises the best results in dairying in particular and in farming in general."⁹⁸ Acting in accordance with this general idea, most papers carried detailed information on various breeds, and Kimball's Dairy Farmer even took the trouble to explain Advanced Registry:⁹⁹

Advanced registry is registry based upon the individual merit of the animal.

Each breed of dairy cattle has some such registry, and each breed has its own manner of conducting tests of cows to show eligibility.

The only strictly official tests are those conducted entirely under the supervision of the state agricultural colleges, in which a representative of the college, personally sees the cow milked and weighs, samples and tests the milk himself; also sending in duplicate samples to the college to be tested there for verification.

These tests naturally are of very considerable expense to the owner of the cow; therefore, the usual test is for seven consecutive days. The owner of the cow must pay \$2 per day, traveling expenses, board and lodging for the college representative during the test. With this expense entailed one can readily see why the seven-day test is

most popular. Many breeders test their cows 30 and 60 days Such a long period is too costly for the average breeder.¹⁰⁰

Although most of the editors favored the special-purpose dairy cow, advocates of the dual-purpose cow were still active. The best exposition of this viewpoint appeared in the Creamery Journal in 1906. The article, it should be noted, ran counter to the customary policy of the paper: "The Iowa farmer knows he can not go into dairying exclusively on his 200-acre farm. He therefore milks Shorthorn and other so-called dual-purpose cows. He can't afford to give up either the milk or the calf. He sends his milk to the creamery, his steer to the feed lot for baby beef, and his sure money to the bank. Of course, there are farmers who do not succeed as well as others, but the same thing is true of the farmer whose special cow gives him a calf as big as a watch charm, and about as useful."¹⁰¹ Apparently Iowa was not the only state where this view prevailed. In 1908 the Northwestern Dairyman noted that the demand for milking Shorthorns was both strong and widespread. Nevertheless, as Kimball's Dairy Farmer remarked: "Just now this general-purpose idea seems to have a revival and certain professors and people who should know better are keeping up a shouting for such a cow to come because they want her. But getting a cow means a great deal more than going out to the barns of the world like a milk-maid and calling 'Coo boss.'"¹⁰²

Editors Again Campaign for Grades

Probably the shortage of farm capital made it difficult for farmers to buy purebred stock. In 1909 Dean Wetheycomb of the Oregon Agricultural College came up with one of the earliest coöperative breed associations: "If the small dairy man cannot afford to own a pure-bred sire by all means let him co-operate with his neighbors and secure the very best animal possible" ¹⁰³ This idea, later vigorously supported by other journals, meant a return to grade cows and a gradual breeding upward. Nevertheless, it was apparently the only way to improve the dairy stock of the country. The editorial campaign for purebred stock had been a failure.

The editors were seemingly more successful in their programs for the care and feeding of cattle. In the established dairy regions farmers developed a new interest in building well lighted and ventilated stables; at least Hoard reported

receiving about one hundred times as many inquiries on barn construction in 1907 as he had ten years before.¹⁰⁴ On the other hand, the newer dairy regions were in about the same condition as New York had been in 1830. As Heatwole's Paper sarcastically suggested: "The sooner dairymen become familiar with the fact that they cannot feed for the highest milk production against Minnesota weather the more money they will realize from their cows. Warm barns are more profitable than cow yards in zero weather."¹⁰⁵ In feeding, editors emphasized high protein feeds to increase milk flow and suggested that nails and wire were very poor fodder.¹⁰⁶ The editors also continued to agitate in favor of the silo. Kimball's Dairy Farmer even carried a regular feature entitled: "THE SILO," and the urban New York Produce Review enjoined butter makers to "TALK SILO." "Silo talk is again in order and from now on the maker should lose no opportunity to point out to each patron the close connection between a plentiful supply of ensilage and economic milk production."¹⁰⁷ Economic milk production was especially important to merchants who could possibly pocket some of the savings. Use of the silo spread, if not rapidly, at least consistently. The newer dairy areas, however, were generally less ready to accept the process than were the established regions. Ensilage was most profitable when used to maintain winter flow, and few part-time dairymen bothered with winter milk production.

And there were other developments in dairy husbandry. Editors began to take interest in milk goats. It was observed that goats were practically immune to tuberculosis, which seemed a great virtue at that time. The profits in kid leather were also indicated, but goat raising did not attract much attention until later.¹⁰⁸ It might be remarked, however, that goat milk came to be relatively popular in large cities, where it was used for weak infants, invalids, and others too delicate to use cow milk. In the 1920's the industry became important enough to support a press of its own.¹⁰⁹

In an era of social reform, it was natural that the dairy press should reflect some of the general ferment. Freedom of the press, generally assumed to be the particular interest of newspapers and controversial political magazines, also concerned the editor of the Holstein-Friesian World. He remarked:

Every publisher, regardless of the size or importance of his publication, is familiar with the government re-

strictions that are thrown about his business, chiefly by the postal department. The Constitution of the United States declares that "Congress shall pass no law abridging Freedom of the Press." Also, "No person shall be deprived of life, liberty or property without due process of law." And yet the Postmaster General is allowed to make rulings that not only hamper publishers but virtually abridge the Freedom of the Press in a most decided manner, and from which there is no appeal.

.....
 We believe that the exercise of this insidious power to abridge the freedom of the press under cover of postal regulation is a vicious curtailment of "the liberty which is the foundation of all other liberties."¹¹⁰

Brown seemed to be writing of abstract justice, although there was probably some personal discomfort at the base of his observation. It was to be several years, however, before the breed journals should be greatly annoyed by the postmaster, and even then there was much justice on the side of the government.¹¹¹

Concurrently, diverse editorial attitudes toward social reform were evident. Some editors took an interest in labor disputes, always on the side of capital, while others supported the Populist demand for parcel post, then regarded as a form of socialism. Meanwhile, the shift of highly paid urban executives to suburban or rural areas (which began in earnest in the period immediately before the first World War) was noted in articles such as: "BACK TO THE FARM."¹¹² The change and shifting of agricultural population also led to concern for farm tenants. Kimball's Dairy Farmer, for example, remarked on the need for better tenure laws in the dairy regions of the country. "Short leases and terms of from three to five years work a disadvantage both to the owner and the renter. A man can hardly get his fields into the best of shape in less than five years, and the owner who wishes to keep his farm in tip-top condition ought to keep a good man indefinitely."¹¹³ The editor then went on to observe that there would always be rented farms, that the situation should be considered normal, and that some steps should be taken to correct abuses. His plea was very largely lost in the multitude of reform demands, and few dairy editors mentioned the subject in later years.

Editors Favor Prohibition

The chief proposed reform of the period, however, was the demand for some form of prohibition. Dairy journalists generally favored a ban on the saloon, partly for moral reasons and partly because of business.¹¹⁴ As Brownell of the Michigan Dairy Farmer put it:

The first persons to step forward and declare that local option is certainly a good thing for business are the milkmen. The demand for milk at Portland since May 1 has been unprecedented and if conditions continue the dairymen will probably have more money than they know how to use before fall. One night last week one dealer had a call for forty pints from a local restaurant after his wagons had been put up for the night. He had already delivered twice the usual amount to the same place. Every restaurant in town is doing a big milk business and the dealers are looking for more cows to take care of the growing trade.¹¹⁵

In the realm of economic theory, the Holstein-Friesian World made a short pronouncement of revolutionary tendency when it remarked apropos of capitalism: "If one per cent profit is right, why not a thousand per cent? If the principle on which profit is based is right, how can there be any extortion of the trusts?"¹¹⁶ Following this line of reasoning, the Nebraska Dairyman concluded that there might not be any extortion. The editor observed: "If trusts, combines and corporations are not undergoing a siege of persecution from so-called 'reform' stand point these days we are at a loss to find the correct definition for it in Webster's Unabridged."¹¹⁷ There was obviously no unanimity among editors on economic theory, or the influence of trusts. Even the Nebraska Dairyman could not make up its mind, for its defense of trusts had been preceded by an attack on the railroads.¹¹⁸

Railroads were particularly subject to attack, especially on the charge of discrimination.¹¹⁹ Apparently the Interstate Commerce Act had not performed as expected. The supplementary Hepburn Act was not much more effective, although its purported functions elicited a few crocodile tears from Kimball's Dairy Farmer:

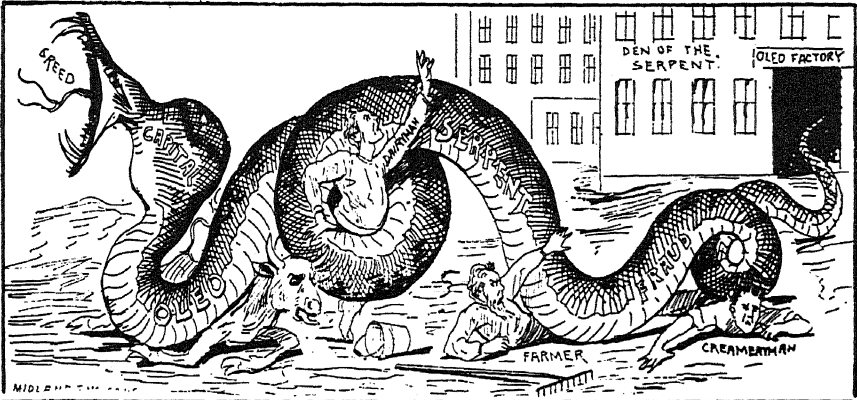
"Tough, But True."

Everybody walks but father—

THE PRESENT.

The Oleo Serpent on Top—The Creameryman, Dairyman, Farmer and the Cow are Crushed Beneath this Horrid Reptile.

FOR THE NATIONAL DAIRYMAN, BY L. MACD, DENTON.



Here is a picture that is most symbolic,
And yet he who runs may read;
It shows how all the friends of cows
Are crushed by fraud and greed.

The good, old, honest cow is rolled
Beneath the reptile's coils;
The farmer, butterman, dairyman
Are also in its toils.

The monster's head is made, you see,
Of money without a limit;
Its gaping mouth, the type of greed,
Shows it wants "all there is in it."

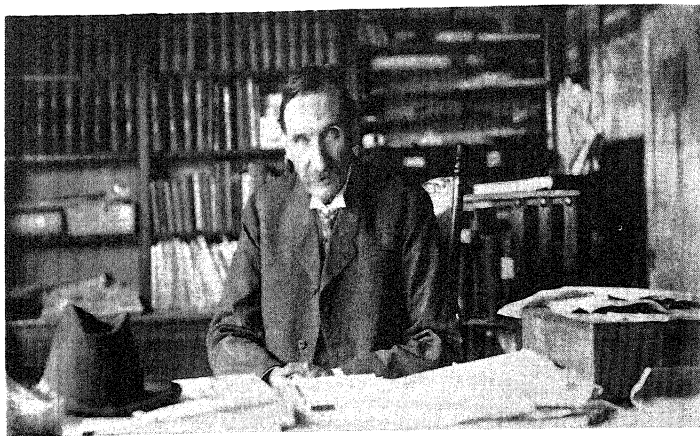
Its central coil, with an iron grip,
Is wound around the dairymen;
He culls, alas! in vain, for help
And throws aside his can.

THE FUTURE.

The Oleo Hydra Driven to the Wall by the Gallant Knight of the Milk Pail, Armed with the Sword of Truth and Backed by Scientists.



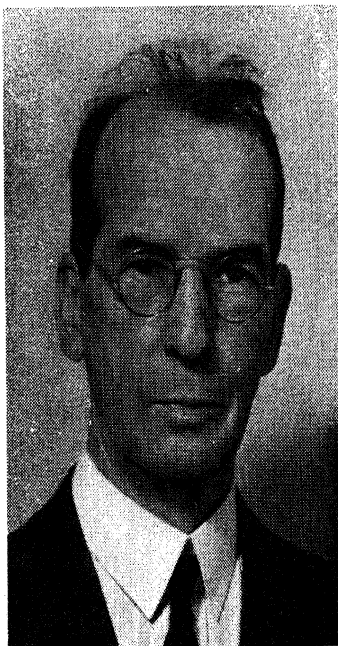
The first important cartoon attack on oleomargarine to appear in a dairy journal was that above, which was run in the National Dairyman in September, 1892.



Above: W. D. Hoard, about 1905.
 Photograph courtesy of Hoard's
Dairyman.



Above: Dennis H. Jenkins, founder
 of the Jersey Bulletin and editor,
 1883 to 1912.
 Right: Thomas D. Cutler, who
 founded the Ice Cream Trade
Journal in 1905.



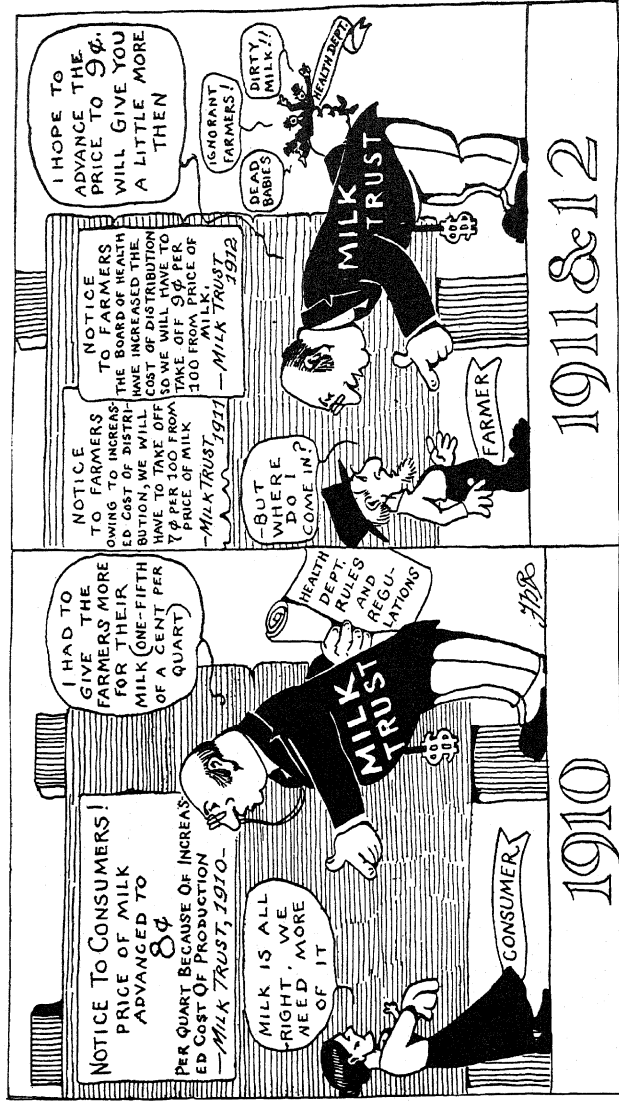


Left: X. A. Willard of the Dairyman's Record and the Dairy Farmer.
Below: Frederick Lowell Houghton, editor of the Holstein-Friesian Register and secretary of the Holstein-Friesian Association of America.



Below: L. B. Arnold, editor of the Dairyman's Record and the Dairy Farmer.





METHODS OF THE MILK TRUST

The cartoonist here reflects producer and consumer distrust of middleman. From the Milk News, November, 1912.

He rides around all day;
Big mogul on a railroad—
He doesn't have to pay.
Little Johnny's walking,
Also Brother Will
So's the whole Dam family
Since Hepburn passed his bill. ¹²⁰

Although the editors were concerned with economic reform, the depression of 1907 hardly rated a mention. Kimball's dismissed it with an editorial entitled: "THE FINANCIAL FLURRY."¹²¹ In 1908 Chicago Dairy Produce noted, as the editors always noted, that dairy farmers were not much injured by depression. In 1909 the Milk News discovered that rises in the cost of living were due to the fact that the country could no longer raise enough of its food.¹²² These were about the only editorial comments on depression or recession. For the editors, the present seemed secure enough, the future looked bright, and even the trusts were not very wicked, everything considered.

On the whole, the slow but certain extension of dairying, the growth of trade in fluid milk and butter in expanding cities, and the consequent development of local dairy journalism denoted good times for the dairy industry. Even the subsequent death of all of the local dairy journals could not mar the picture, since many of these lived well beyond 1910. The rather sudden outbreak of specialized columns and the emphasis on subjects other than dairying, while perhaps overdone, were indicative of an alertness on the part of the editors. They were determined to offer as much as any competitor.

The failure of the Grout Bill to produce anticipated results disappointed and confused the editors. Still, the industry itself began to move into the era of electric lights and gasoline engines, of government supervision of the quality of foods, and of direct assistance to farmers. These developments were fostered, or at least cheered by the dairy editors.

At the same time, there was a backlog of editorial programs, such as those for cleanliness on the farm and in the creamery. Neither of these programs seemed to make much progress until local or national legislation forced reforms on a frequently reluctant industry. As a result of this experience, the editors had reason to believe in the efficacy of laws.

Dairy Journalism Past Its Greatest Era?

By 1909 the territorial expansion of dairying had just about ceased. The regions devoted to dairying were to become more intensely so in the coming years, and a few new metropolitan centers were to arise, but generally, the dairy area was already established in 1909. At the same time, dairy journalism became fairly well settled on a national basis. Only two significant and long lived papers were founded after 1910, and thus dairy journalism was also past its great era of expansion.

To all intents and purposes the next forty years of dairy journalism were dominated by four chief concerns which had appeared in the press before 1910. These were simply, and rather concretely: (1) the fight against oleomargarine; (2) the demand for cleanliness; (3) insistence on cow testing programs; and (4) demands, according to the level of prosperity, that government either get in or out of business.

Chapter 10 - Prosperity and the War 1910-1918

Editors Shift Emphasis to Economic Matters

Two new dairy papers appeared in 1910, the Butter, Cheese and Egg Journal, published at Milwaukee, and the Guernsey Breeders' Journal, at Peterborough, New Hampshire. Between 1911 and 1918 nineteen other dairy papers were begun, most of which were intended to circulate locally. In the order of their appearance these were: the Milk Dealer, of Milwaukee; the Angora Journal, of Portland, Oregon; the Milk Plant Monthly, of New York; the Dairyman's Journal, of Marine, Illinois; the Milk Magazine, of Waterloo, Iowa; the Stock and Dairy Farmer, of Duluth; the Western Confectioner-Ice Cream News, of Los Angeles; Farm and Dairy, of Salem, Ohio; Ayrshire Digest, of Brandon, Vermont; the Dairyman's Price Reporter, of Pittsburgh; the National Poultry, Butter and Egg Bulletin, of Chicago; the Black and White Record, of Lacona, New York; Goat World, of Vincennes, Indiana; Dairymen's League News, of New York; New England Dairyman, of Boston; the Journal of Dairy Science, of Baltimore; the Ice Cream Review, of Milwaukee; the Western Milk Dealer and Dairy Counselor, of Seattle, Washington; and the Iowa Dairy Marketing News, of Des Moines.¹

In January, 1910, the weekly Butter, Cheese and Egg Journal appeared at Milwaukee, published by H. P. Olsen and edited by D. S. Burch. The subscription price was one dollar per annum.² The journal shortly developed into a technical paper for butter and cheese makers. Egg marketing was given only perfunctory attention, and in 1928 the word was removed from the title.³ From 1920 to 1951, E. K. Slater, first publisher and editor of the Dairy Record, served as editor of the Butter, Cheese and Egg Journal.⁴ In 1930 Olsen decided to specialize further while reducing the fre-

quency of publication. The journal appeared as three separate periodicals, the National Butter Journal, Concentrated Milk Industries, and the National Cheese Journal, from 1930 to 1932.⁵ Concentrated Milk Industries covered a new field in dairy journalism, but was not completely successful. In February, 1932, because of "General business conditions," Olsen merged the three publications into the semimonthly National Butter and Cheese Journal.⁶

In January, 1910, the American Guernsey Cattle Club at Peterborough, N.H., began the Guernsey Breeders' Journal. In 1916 the journal changed from a monthly to a semimonthly. Between 1910 and 1950, William H. Caldwell, Karl B. Musser, and L. A. Lounsbury successively edited the Guernsey Breeders' Journal.⁷ In his first editorial, Caldwell noted previous efforts at Guernsey journalism: "The demand for such a publication is not a new one. Back in the early period of the existence of The American Guernsey Cattle Club support was given to a publication of similar name. During the last fifteen years an endeavor has been made in connection with the Herd Register to keep alive the spirit and purpose of the work. The remarkable increase in Guernsey interests during the last two years has brought about the necessity of separating this work and that of The Register. The result is—The Guernsey Breeders' Journal."⁸ Thus after several abortive attempts, the Guernsey breeders established an enduring journal.

One of the more significant developments in dairying was increased governmental assistance and regulation of producers and distributors. Government help in marketing had been increasing over the years, but it reached new heights just before the first World War. The war itself brought even greater state and national assistance and regulation and also introduced a prosperity unequalled in the previous history of the industry. In the dairy press, comments on politics, economic theory, and marketing occupied vastly more space than in any former period.

The philosophy of hard work and progress continued to dominate editorial thinking. MacVean of the Milk News spoke for all when he observed: "Many people fail to get anywhere because they think they were ticketed to the station they are at. There is no stopping place along the way of life. From the cradle to the grave the great command is move up, keep a-going. You may go forward or you may go back, but keep a-going."⁹ Faith in hard work was justified by the relative increase of prosperity. Progress seemed inevitable.

With minor fluctuations, business conditions improved steadily as the journals indicated in incidental reports. In 1912, for example, the Ice Cream Trade Journal complained that since 1900 the number of dairy cows in the country had increased only 21 per cent at a time when dairying was most profitable. In 1915 the Butter, Cheese and Egg Journal observed that it was no longer possible to get a hotel room with bath for a dollar, and in 1918 the Milk Reporter noted the sale of some Illinois farm land at \$328 an acre.¹⁰ Most of the papers carried market information which also showed increasing prosperity. Butter prices were high in 1911, fell slightly in 1912, and rose phenomenally by 1917. In 1912 the price of fluid milk was low, but by 1918 consumers objected to the price of sixteen cents a quart. A newspaper editor in South Carolina described the milk price as a holdup.¹¹

Devote Less Space to Social Problems

On the whole, the editors devoted less space to social problems than formerly. The dairy journals, however, still advocated prohibition as a step toward greater milk consumption. In 1914 the Holstein-Friesian World happily listed the dry states and declared that "the prospect is surely favorable for the day when Holstein milk will be not only our favorite national beverage but the favorite beverage of the world."¹² Although the Ice Cream Trade Journal also favored a reduction in drinking, Cutler ruefully observed that prohibition was not an unmixed blessing. In 1917 he reported:

An ice cream manufacturer in a town of about four thousand, in one of the middle Atlantic states, has a competitor which is giving him some food for thought. The competitor is an ice cream manufacturing company owned by two sons of a brewer. The sons needed employment and Pa set them up in the ice cream business. As the old man had a kind of professional pride in his ability to "set 'em up," he did the job well and furnished them with a prop to lean against.... Of course they get their refrigeration free, from the brewery plant, and when they want a truck for ice cream delivery they just call on Dad, a situation somewhat perplexing for the man who has to meet such competition. Moreover these young gentlemen think they know all there is to know about the ice cream game. They refuse to consider the proposition

of joining the state ice cream manufacturers' association, and, as their delivery and refrigeration expense is nothing, they are proceeding to set a new pace in the price of ice cream in that town. Now it so happens that the town is wavering on the verge of the dry proposition, and the injured ice cream manufacturer is debating with himself as to whether he should, in the interest of sordid gain, support the wets, in their effort to hold his satanic majesty in power, or whether he should assist the white robed queen of total abstinence into the throne chair. In the one case, he figures the continued presence of the brewery, with free refrigeration and free delivery service to his competitor; in the other, he sees the useless brewery turned into a large ice cream factory. What would you do? ¹³

The brewery with its refrigeration plant, its wagons and teams, its warehouses and bottling facilities was indeed capable of entering not only the ice cream trade but also the business of fluid milk distribution.

Before the war, dairy journals encouraged local papers to assist the industry. In 1915, however, the Creamery Journal recommended censorship to prevent asininity in the reporting of dairy information.¹⁴ Although the dairy editors constantly attacked local newspapers for inaccuracy and venality, few cared to propose censorship. The breed journals were particularly sensitive on the subject. In 1910 the Jersey Bulletin and the Holstein-Friesian Register had experienced some difficulty with the post office. Jenkins complained:

Within the past year a decided change had to be made in THE JERSEY BULLETIN'S policy of publishing everything considered Jersey news, in compliance with a notice from the Postoffice Department at Washington, that the second-class mailing privilege might be withdrawn unless such a change was made in the reading matter

.....
The assumption that THE JERSEY BULLETIN is "merely a medium for the circulation of advertisements of Jersey breeders," can not, we think, be sustained by an investigation of its reading matter. Even when crowded with articles considered "objectionable" at Washington, there was the usual space devoted to current news and communications of general interest.¹⁵

Bureaucratic judgment on the contents of the journal would seem indeed accurate. The difficulties of the breed journals served as warning to other editors on the dangers of censoring.

In 1916 the Creamery Journal carried the first extensive article on safety precautions. Some earlier articles had appeared on the subject, but they had been fairly specific and had not used the catch-words "safety first." In 1915, for example, creamerymen were warned not to let steam escape so fast that it scared horses, while the Jersey Bulletin warned farmers that fall was the season for barn fires.¹⁶ The Creamery Journal, however, catalogued most of the major hazards and recommended safety practices. Campaigns such as this were to become more prominent later.

Farm comfort also attracted editorial attention. In 1911, the Milk News carried an article on "COMFORT IN A SHOWER BATH," and in 1914 Brownell, of the Michigan Dairy Farmer, told of a farm he visited:

There were hot and cold hard and soft water on tap on two floors, a fully equipped toilet and in the cellar a furnace heating plant. The cellar was cemented throughout, thus reducing dust and dampness to a minimum.

.....
Life on many a farm ought to be transformed by the providing of these conveniences. The old ratty, ill-lighted, stove heated dwelling should be torn down and a modern house built in its stead. We are a long time dead, and it is a pretty good thing to have some of these comforts as we go along when we have the capacity to enjoy them.¹⁷

Editorial interest in enjoyable farm life was to increase and in time led to regular columns on home economics and related subjects.

Politics Receive More Attention

Editor reaction to political problems varied according to the predilections of the editors. Although journalists had commented on political affairs for some time, they had generally restricted themselves to specific dairy programs. Open partisanship was seldom manifest. In 1911 Jenkins expressed the usual attitude when he wrote:

Once in a while THE JERSEY BULLETIN is taken to task by obliging friends (?), because, forsooth, we do not direct our editorial darts on one side or the other of some controversy, or come out flatfootedly in favor of

some project and defy all comers to prove us in the wrong. But that is not THE BULLETIN'S policy. We do not believe in mock heroics, in "red fire," in this "whoop hurrah!" business, or in any other attribute of "yellow journalism." We are too busy looking after the legitimate publicity of the Jersey cow and the gospel of better dairying to waste time on non-essentials—and worse.¹⁸

The attitude of noninterference gradually changed as government regulation of the dairy industry increased. In 1911, for example, Caven, of Chicago Dairy Produce, railed against what he called "fool storage laws." This blast was not as partisan as the outspoken pro-Roosevelt campaign carried on by the Milk News in 1912.¹⁹ The editor asserted that "crooked business can't be divorced from crooked politics by either of the old parties, because the old parties are in the grip of the bosses, and they won't let go."²⁰ The less partisan editor of the New York Produce Review merely reported that "considerable interest was manifested in the straw vote taken on the Mercantile Exchange last Thursday. One hundred and twenty-four ballots were cast with the following result—Taft 48, Roosevelt 44, Wilson 29 and Debs 3."²¹

Editors did not yet publicly denounce the evils of paternalism or "creeping socialism." They were even anxious to accept government help in marketing and quality regulation. As a result of the business slump of 1913 and the hoof and mouth outbreaks of 1914 and 1915, editors also demanded further government intervention in the form of quarantine regulations, payment for slaughtered cattle, and other action to stem the disease.²²

Before America entered the First World War, editors were more interested in domestic than in foreign politics. Foreign news items occupied a greater proportion of space than in any former period, but these articles were restricted to such topics as Danish coöperation and handling of tubercular infected milk, Canadian milk standards, English experience with hoof and mouth disease, and Guatemalan demands for Jersey cows.²³ In 1915 Hoard's Dairyman reprinted an article on the Russian peasant, and Chicago Dairy Produce noted an increased Haitian demand for American butter.²⁴ It was not until 1919, however, that Stanton of the Milk Reporter commented on international politics. Even then he resorted to a quotation: "The National Repub-

lican queries thus: 'What has become of the old fashioned blatherskite who used to argue that if the government owned the railroads the earnings would pay the whole cost of running the nation and we could dispense with taxes, with passenger fares and freight rates about half what they were under private ownership? He is busy proving that the league of nations will keep us out of war' "25

Whatever their attitude toward international politics, foreign commerce continued to concern the editors. In most cases they merely denounced attempts to lower the tariff. In 1911, the Milk News had condemned the proposed Canadian reciprocity treaty: "All agricultural organizations are unitedly opposing the bill because in its workings it must cheapen what the farmer has to sell, and promises no relief in the matter of what he has to buy. The generally accepted opinion is that it is largely in the interests of railroads doing an international business. It is well that our railroads may prosper, but not at the sole expense of the man who tills the soil."²⁶ The editorial was not as fervent as earlier denunciation of the railroads, but such concern for the producer was uncommon in a merchant trade paper. The journal was jubilant when the Canadian parliament rejected the treaty.²⁷ In 1912 the Milk News denounced Woodrow Wilson as a free trader. The editor asserted that the president was a college professor and was consequently incompetent to handle affairs of state. The Jersey Bulletin noted that Wilson was persistently wrongheaded on the questions of reciprocity and artificial butter color.²⁸ In 1913 the Milk Reporter protested the imports of Canadian milk under the new tariff. One year later, Willson of the Elgin Dairy Report attacked the Irish. He complained that they not only monopolized American political offices, but even dared to sell butter to the American market. Obviously, any liberal tariff was unpopular with the dairy press.²⁹

The World War, however, changed the flow of international trade and ended editorial fear of American free trade tendencies. In 1912 the New York Produce Review protested the importation of 103 casks of Siberian butter. By 1916, however, as the Creamery Journal reported, the Russian government offered exceptionally high prices for butter.³⁰ In 1918 the Milk Reporter observed the adverse effects of protection when British import restrictions hampered the sale of American butter. Stanton, of the Milk Reporter, was not pleased to discover this trade barrier.³¹

World War Effects Changes

Other editorial, political, and economic ideas were also disturbed by the war. In 1917, for example, Cutler had reprinted an article which declared that the German legislative system was in several ways superior to the American. This questioning of the American system did not persist after April, 1917.³² In 1917, however, the dairy journalists had not yet confounded loyalty with political opinion. The Dairy Record of 1918 was more outspoken on politics and loyalty than any of its contemporaries, but the attitude was a passing one: "The Dairy Record would not be a worthy representative of the creamery operators' organization which owns and publishes it, did it not at this time point out to its Minnesota readers the real issue involved in Minnesota's primary election. For there is only one issue—Loyalty, which means the winning of the war. No one candidate has any claim on Loyalty, but there is only one kind of Loyalty, that counts, and that is the kind which overshadows all other political and personal ambitions and considerations."³³

In spite of occasional patriotic outbursts, the editors treated the First World War primarily as an opportunity for profit. In 1914 atrocity stories were foremost in the editorial mind. Saylor of the Pacific Dairy Review was particularly disturbed because no cattle were to be exported from Jersey. Instead, "their spare little carcasses may yet be commandeered to feed the hungry fighting legions, or a population starved to the point of desperation by a condition that might aptly be styled as hell turned loose . . ."³⁴ It was difficult to tell which upset the editor more, the possible fate of the Jerseys or the people.

Possible extermination of European Jerseys did not greatly disturb the Holstein-Friesian World which was more concerned with Belgian relief: "Five dollars pays for a barrel of flour. How many barrels are you sending to the starving Belgians? Every dollar sent to the Belgian Relief Committee for this purpose fulfills its mission without the loss of a penny for expense of handling."³⁵ By 1915 the editors forgot the alleged atrocities and became resigned to the war, which they treated only incidentally.³⁶ In 1916 Shoemaker, of Kimball's Dairy Farmer, used the preparedness campaign of President Wilson for purposes of his own. He warned: "While our attention is being called daily to the subject of preparedness as a national issue, we should not overlook the fact that the subject of preparedness is one

that should be uppermost in the mind of every farmer in the corn belt with regard to preparing for his crops of 1916. This applies especially to the corn crop."³⁷ Other articles of 1916 complained of the reduced supply of rennet, usually imported from Europe, boasted of money collected for the Red Cross, and suggested the cheerful thought that the extensive destruction of European livestock would provide American breeders with good sales outlets, and also create a market for American dairy products after the war.³⁸ In 1917 a writer for Hoard's Dairyman emphasized the foreign aspect of the struggle when he warned farmers of the railroad car shortage caused by the amount of freight being moved to help Europeans fight their war.³⁹

American entry into the war changed the editorial approach to the conflict. Hoard was more restrained than most. He merely indicated the food shortages around the world and urged greater production as an humanitarian activity. In contrast, Brown, of the Jersey Bulletin, urged Jersey breeders to produce more to feed the nation and incidentally cash in on the rise of milk prices.⁴⁰ The Milk Reporter also noted the rising milk prices and suggested the profits to be made, while the Ice Cream Trade Journal predicted that America was about to enter on a period of unprecedented war profits.⁴¹ The Holstein-Friesian Register was also aware of economic conditions. As Houghton noted: "With milk going up and feed going down; with consumption of dairy products increasing while the number of producers is decreasing, what better assurance of a field of profitable business do you want? Buy cows, man, while the buying is good!"⁴² Yet in spite of the general editorial approach to the war, the Milk Reporter seriously complained that: "in this time of war, when the people of this country should be united on one subject, when mutual confidence and respect should band our people together, it is disgusting to read in certain sensational newspapers that a large part of our business men engaged in the distribution of food are maligned and misrepresented, and pictured as selfish enemies of their fellow men. So far as the milk distributors are concerned, the conditions surrounding them, and the results of their labors, this misrepresentation and falsehood as to their purpose is amazing."⁴³

The New York Produce Review approved the use of milk powder in the army, protested the alleged unfairness of the many government regulations, but also supported government campaigns for the sale of war bonds.⁴⁴ The Milk

Reporter urged subscription to the Fourth Liberty Loan with some dairy-like comments:

The German people are singularly like a bull. Had Taurus Germanicus been capable of seeing clearly, he would not have charged, bull blind, into this war. For four years, he has stamped and bellowed in insensate rage. And the stone wall he has hit is opening his eyes.

His eagerness for carnage and his blind confidence are beginning to wane before the superior mettle of the allies.

One way to spread terror to his brutish mind is to over-subscribe the Fourth Liberty Loan.⁴⁵

On the whole, however, patriotic editorials of this sort were rare.

Government Is Panned and Praised

New signs of a cleavage between the farm and trade journals appeared during the war. Government regulation of business, or if the editor chose, "paternalism," was the basic issue. As early as 1914 the Elgin Dairy Report commented: "It has gotten so nowadays that the average business man, whether his operations be large or small, looks with relief upon the adjournment of our lawmakers at Washington, as in these days of paternalism, the business man does not know what next in the way of legislation that will hamper or destroy his trade. This, it seems to us, is a rather sad commentary upon our law making bodies, but unfortunately it is very true."⁴⁶ In contrast, Kimball's Dairy Farmer castigated the federal government for insufficient help in the control and eradication of hoof and mouth disease, while Chicago Dairy Produce unexpectedly praised the Farm Loan Act. Shoemaker lauded the county agent, and Brownell supported the work of the United States Employment Agency in finding agricultural laborers. The market reporting magazines tended to approve of government publications which publicized the virtues of milk or outlined new dairy techniques. In 1918, however, the trade editors squealed in protest when the government began market reporting. Such activity was held to be paternalism.⁴⁷

Conflicting attitudes of farm and technical papers on price supports for farmers was most apparent in an editorial in the Ice Cream Trade Journal of 1917. Cutler wrote:

When the manufacturer encounters competition he

looks anxiously into the possibilities of lower prices, increased output, with corresponding reduction of overhead, reduction of cartage expense, increased economies in plant operation, and, when he has exhausted his efforts, settles down to a grim determination to see whether the other fellow has calculated correctly.

Not so the farmer, for when competition overtakes that august lord of the soil, he hunts up his congressman and demands the passage of a national law putting his competitor out of business.

.....

To add to the difficulty the nations at war are clamoring for his milk, cheese and butter at high prices and making the poor farmer work harder than ever to induce his cows to give more milk to supply the insatiable demand.

As if this were not enough the price of farm land has advanced to such an extent in the past few years that he cannot afford to use it for dairying and he is still further handicapped by the fact that the value of each of his dairy cows has increased 49% in the past six years, so it is evident that dairying is an unprofitable business.

It is obvious, then, that a law is required which shall fix the price of milk at 20 cents per quart and compel every man, woman and child in the United States to consume an amount sufficient to guarantee the sale at that figure of every quart produced for a period of 10 years, the time being limited to permit an advance in price if, at the expiration of the stated period, the farmer does not think he is getting all that he should have.

Will not one of our patriotic congressmen suggest the importation of the new British war measure guaranteeing all farm product prices for a period of years? Surely the republic can do that much for its downtrodden sons of the soil, and, while we are at it, would it not also be advisable to pass a law guaranteeing a given consumption of ice cream at \$2.00 per gallon?

Let us not be niggardly in conferring legislative benefits upon ourselves. As long as we tax the many for the benefit of the few, why not tax the many for the benefit of the many, and then we shall all be wearing palm beach suits and resting under cocoanut trees by the gentle southern sea.⁴⁸

Regardless of what trade editors thought, the farm journals

continued to ask for more government assistance to farmers. Disagreement between classes of periodicals became more prominent when price supports became a reality. In 1917, however, this battle was some distance in the future.

Editorial economic theory generally emphasized restrained free enterprise. The editors worked various changes on the theme, but in an expanding economy, their attitudes were essentially those expressed by Willson in 1914: "There is a constantly growing appreciation of the idea that the greatest good to the greatest number is the best insurance the dealer can work for to assure his own prosperity. The old time notion that no man could prosper save at the expense of somebody else has been proved to be fallacious" ⁴⁹ The editors also demanded that competition be preserved in all lines of business. Formerly the dairy press had attacked trusts in general and had shown dislike of the centralizer as tending toward monopoly. By 1911, however, a few journals saw real danger of a trust within the dairy business. In the Chicago dairy district, Borden's seemed the greatest threat. The Milk News denounced the company and encouraged farmers to organize and resist it. ⁵⁰ In 1915 the Butter, Cheese and Egg Journal described the methods employed by an unidentified centralizer in Colorado:

Suppose a co-operative creamery is started in some locality to retain some of this profit for the farmer who does most of the work. The creamery trust instantly raises the price till it drives out the little fellow, and this is the way it is done:

The big concern is getting cream from 100 different towns, paying 30 cents for its butter fat. A small creamery is opened in one of the towns and agrees to pay 32 cents a pound, 2 cents above the trust price, but not too high for a liberal profit. The trust instantly raises its price to 34 cents. The competition continues till a price of 40 cents is reached, at which price no profit is made, and the local concern closes down, leaving the trust free to cut the price again to 30 cents and continue its robber tactics. ⁵¹

This conduct was clearly a violation of the ideas of Jeremy Bentham and even later writers. But economic theory was never very precise, and authorities could be found for any side of a question. Thus Stanton, of the Milk Reporter continually urged consolidation of milk routes and even sug-

gested municipal milk distribution. He argued with a quotation from John Stuart Mill: "When a business of real public importance can be carried on advantageously only upon so large a scale as to render the liberty of competition almost illusory, it is unthrifty dispensation of the public resources that several costly sets of arrangements should be kept up for the purpose of rendering the community this one service."⁵² The argument was pertinent, but not very persuasive. Few editors joined the campaign, and even fewer distributors.

Calls for Economic Leadership

Orthodox economic theory supported some protection of the consumer. Naturally the editors were not always happy about government regulations, but as Stanton of the Milk Reporter put it: "Antagonizing the fixed policies of health departments is expensive and is not calculated to enhance business reputations."⁵³ Other papers advised creamerymen to prepare their own compulsory pasteurization laws, since such laws were inevitable, and it would be better to have them framed by the industry than by terrified amateurs.⁵⁴ The editors also supported inspection of dairy farms, partly on the ground that the consumers required it and partly because it was unfair for dirty farmers to compete with clean ones.⁵⁵ The editors also commended legislation to prevent homogenized milk being added to skim and the combination passing as whole milk. In short, the press agreed with the Butter, Cheese and Egg Journal that "a good shaking up of the creamery business may not be so bad after all" ⁵⁶

Legislative efforts to protect the public from fraud or filth naturally led to some absurd regulations. For example, skim milk could not be sold in New York and Kings counties, New York. Stanton angrily asserted that "in all the annals of law making it is impossible to find another instance that equals this for 'jackassity' in legislation."⁵⁷ The editor demanded repeal of the law. Perhaps the best summation of editorial attitude to urban health regulations was presented by the Milk Reporter in 1917:

Very early in the morning,
Tuttle sought the spotted cow,
And with gloves his hands adorning
Took the night cap from her brow.

Roused her from her well-bred slumber
Bathed her features with a sponge,

To the bath-tub made her lumber
For her early morning plunge.

Manicured each horn and hooflet,
Sprayed her breast with listerine,
Scrubbed her stall from floor to rooflet,
Till each inch of it was clean.

Then while her attention centered
On her predigested bran,
Reverently Tuttle entered
With a silver-plated can.

Into which, by gauze protected
From baccili and their ilk,
Tuttle skillfully projected
Little streams of purest milk.

With a microscope he viewed it,
Slew a microbe here and there,
Strained it, weighed it, cooled it, stewed it,
Pasteurized it, too, with care.

Then in bottles small he hauled it
To the city, and in short—
Everywhere that Tuttle sold it
Cost them 60 cents per quart.⁵⁸

On the whole, the dairy journals were not adverse to reasonable protection of the consumer. On the other hand, editors did object to some forms of government assistance, particularly market reports and price supports. In most cases, the objections were based more on personal interest than on applied economic theory.

Centralizers and Coöperatives Battle

Journalistic comments on marketing problems ranged from support of daylight delivery of milk to condemnation of centralizers. The war on centralizers continued along legislative lines. The Dairy Record in particular demanded legislation to keep creameries clean and prevent the use of chemical preservatives. Apparently the centralizers still accepted dirty cream. In 1912 Sandholt reported: "Inspector Johnson, of the Minnesota Dairy and Food Department, says he finds rats in the cream shipped to the centralizers in Twin Cities. We expect any day to see the General Secretary of the Northwestern Shippers' Association come out with a statement in the papers to the effect that rats in

cream do not injure the butter and that a little rat is just what is needed to distinguish 'genuine' butter from oleo-margarine."⁵⁹ Competition between centralizers and local creameries was so severe that both sometimes cheated on the Babcock test, increased the reading of fat content, paid more for the milk without actually raising the price, and thus drove other creameries out of business. Tricks such as these were, of course, roundly condemned by the editors.⁶⁰

Meanwhile, some selling procedures changed. In 1912 the Chicago Butter and Egg Board discontinued all "official" quotations for butter, possibly because of a threat of an anti-trust suit. During the war, future buying and selling was abandoned because of the "growing opinion among the people at large that sales of 'futures' in food products result in advancing prices of these products"⁶¹ The editors of merchant journals did not subscribe to this popular belief. Nevertheless, the papers approved a suspension of "future" trading because of the public relations value of the move.⁶²

By about 1900 editorial complaints about Elgin manipulations had subsided. In 1910, however, Chicago Dairy Produce again charged Elgin with attempting to keep prices high. Caven persistently attacked Elgin from 1911 to 1916. In 1913, a depression year, he was joined by the editors of the Butter, Cheese and Egg Journal and the Dairy Record. They all complained that the Elgin market was too small to be nationally important. On the other hand, Willson of the Elgin Dairy Report asserted that Elgin quotations, when given wide publicity, prevented crooked merchants from cheating producers and consumers.⁶³ American entry into the war ended the editorial altercations, since the new prosperity reduced the importance of alleged Elgin manipulations.

Before and after the war, editors advocated the use of every new dairy product in order to increase profits. During the war, however, journals emphasized efficient use of food. In 1910, the American Cheesemaker proposed greater use of dried milk because of the waste involved in handling liquid milk. The editor suggested "reduction of the milk to a powdered form at the farm," as a solution to the problem.⁶⁴ In 1914 cheese rind losses were decreased by canning cheese. Stanton, of the Milk Reporter, approved the process, but the public did not respond adequately. Editors also advocated buttermilk cheese (presumably to reduce waste of buttermilk) and tried to encourage greater use of skim milk either for food or casein.⁶⁵

The various papers carried a fair proportion of local news

ranging from cow testing in Illinois to ice cream marketing on the West Coast.⁶⁶ In 1911 the Jersey Bulletin noted increased Jersey sales in Hawaii and in 1912 discovered that "dairy conditions in Kansas seem very favorable."⁶⁷ The Dairy Record commented on the progress of dairying in Minnesota and North Dakota, while the Pacific Dairy Review noted the farming potentialities of Alaska.⁶⁸ The Jersey Bulletin found the greatest advances in the South, where boll weevil infestations encouraged planters to devote some attention to dairying. The Jersey was especially adaptable as a southern cow, since it could withstand a hot climate better than most breeds. Tick fever, however, threatened to retard southern dairying.⁶⁹ Nevertheless, casual articles in journals indicated that dairying was increasing in the South and West, and the editors approved.

From time to time, editors attacked the railroads, charging rate discrimination or unethical conduct in handling damage claims. Express companies were also attacked for excessive charges. In 1912, Cutler doubly damned them when he remarked, "The express companies have forfeited all sympathy from every one except the railroads"⁷⁰ Discontent with the attitudes and activities of railroads was, however, a minor part of editorial interest in internal transportation. Trade journals constantly urged the use of automobiles as delivery trucks and even advised which ones to buy. In contrast, Hoard's Dairyman and the Dairy Record feared that owning a pleasure car would perhaps destroy some of the ancient virtues of farmers and butter makers. In 1916 Kimball's Dairy Farmer suggested mixtures for antifreeze for engine radiators, and in 1916 the Ice Cream Trade Journal carried a three-page article on "AUTO LUBRICATION AND OIL CHARACTERISTICS."⁷¹ Information as detailed as this indicated that the automobile was no longer an experiment or toy, but had come to stay in the dairy industry. The need for better roads, chiefly induced by automobile traffic, was noted by both the Elgin Dairy Report and the Holstein-Friesian World.⁷²

Trade Journals Favor Labor Legislation

Before the First World War the technical journals showed the most interest in labor problems. Trade editors generally felt that creamery wages and working conditions were inadequate, and some even counseled butter makers not to work under unsatisfactory circumstances. A few even proposed a creamerymen's benefit association. At the same

time, the editors carefully insisted that they were not counseling trade unionism, and as before, they soundly denounced labor unions when occasion offered.⁷³ On the other hand, labor legislation was treated sympathetically by at least one of the trade papers. In 1916, the Dairy Record supported the Minnesota Workman's Compensation Law and called for the issuance of clear salary statistics to keep employers in line.⁷⁴ The Dairy Record, however, was unique even as a trade journal.

In contrast to the sometimes mild approach of the technical journals, the farm periodicals opposed all benefits to labor, organizational, economic, or social. This opposition arose partly from the difficulty of obtaining farm labor. Even as early as 1911 the Jersey Bulletin worried about the drift of farm population to the city. The problem became more pressing after the World War began. In 1914 Brownell, of the Michigan Dairy Farmer, stated the essential arguments of the farm journals when he commented on the pay scale inaugurated by Henry Ford.

After viewing first-hand the mob of men that stormed the factory entrance for two weeks following the announcement of the wage-increase and after giving due consideration to the present nation-wide shortage of farm labor, we are not as much inclined to enthuse over the Ford profit-sharing plan as are other publications. It seems to us that the plan is one that operates directly and forcibly to accomplish what economists and wise thinkers of this country are vainly seeking to prevent; namely, the flow of rural labor to the cities. Instead of doing anything to increase the volume of food-supply, this plan will cut both ways by creating an increased number of consumers while at the same time lessening the number of producers.⁷⁵

In the same year there was some labor agitation for the eight-hour day in California. Like all other legislation of its type, it was denounced as unworkable. Ironically, the Pacific Dairy Review spoke for a farm organization when it remarked:

Elsewhere in this issue we publish another statement from the Farmer's Protective League, which is an organization that is taking the lead in opposing the socialistic initiative measure proposing a universal eight-hour law for wage workers in California. We commend this

particular statement for its wise and diplomatic treatment of the subject from the point of view of organized labor represented by the trade unions. While many of those affiliated with unions vigorously support the measure, there are many within their ranks, including leaders, with heads sufficiently level to know that they would be the main sufferers in the general disaster that this socialistic far fetched, uneconomic, impracticable and impossible scheme would bring upon us. This element must be won over and induced to cast their votes for the sane side of the controversy. Wholesale denunciation of organized labor interests won't do it.⁷⁶

When eight-hour legislation subsequently passed, agricultural labor was carefully excluded from the law.

After America entered the war both farm and technical periodicals became even more concerned about the labor shortage. The dairy journals, particularly the farm papers, praised government efforts to solve the problem by operating an employment service. The attempted solution was inadequate, and in 1918 the Dairy Record took the lead in recommending a practice which was to become commonplace. As Sandholt noted: "We do not believe in the operator's wife working in the creamery, but we do believe that we may as well first as last, face the issue and make up our minds that we shall have to employ women in our creameries."⁷⁷ More extensive use of machinery was also urged as one solution to the labor shortage. The editors sought to encourage the use of new machinery but were not always immediately successful. As Hoard remarked in 1915:

Every improvement, every change of method or machinery in the conduct of farming has been denounced by most farmers at one time as not being practical.

We remember well of hearing leading farmers in Central New York declare sixty years ago that the mowing machine would never become practical. Some said it "poisoned the grass and that the cattle would sicken and die on the hay." Others declared it would destroy the meadows. How little the average man knows of the future, judging by his own day and generation.⁷⁸

Editors still recommended that the gasoline engine replace the steam engine in creameries. In 1913 the Milk Reporter advocated the employment of the milking machine.⁷⁹ In 1915 Hoard's Dairyman asserted that the laborsaving device had

passed the experimental stage. The shortage of farm labor during the war did more than anything else to spread the use of milking machines. The machine did not relieve the farmer of using his brains, but it did help solve the problem of what Brownell called "scarce and incompetent farm help...."⁸⁰

Other mechanical inventions also assisted to relieve the labor shortage. As the Northwest Dairyman and Horticulturist observed in 1917:

On every hand we hear the call for more help on the dairy farms of the Northwest. The shortage of labor is causing many farmers to hesitate in their plans for increasing production at a time when such a move is desirable not alone from motives of patriotism, but because the year holds promise of good prices and reasonable profits.

.....
One thing that will go a long way toward solving this problem is the installation of machinery that will enable fewer men to do more work.

The motor car has already come into general use on the farms and is an important factor in saving time.

The motor truck, the truck attachment and the trailer are increasing the work per man....

The tractor is now looming up as a machine that will do its share in helping farmers to do more work with less help.⁸¹

Whitmore, editor of the Northwest Dairyman and Horticulturist, continued to urge the use of the tractor, although other dairy editors seldom mentioned the machine. Shortage of machinery, caused by war production, limited the mechanical assistance available for farmers and creamerymen.⁸²

As before, the trade editors directed their readers to books on manufacturing problems. The dairy journals also carried such diverse information as how to condense milk, build a cheese curing room, handle cheese hoops, or preserve strawberries for ice cream. James Sorenson, feature writer for the Dairy Record annually urged creamerymen to plant flowers around the plant, because "a hundred people see the outside of the creamery to the one who investigates inside."⁸³ Hoard told farmers not to waste skim milk by sending low-test cream to the creamery. Editors urged creamerymen to promote use of the silo, since more

silos would result in more and better butter. In 1915 the Butter, Cheese and Egg Journal informed butter makers that they should decrease the amount of artificial coloring used in the summer. Otherwise the butter was too highly colored to sell well.⁸⁴

The chief editorial interest, however, centered on the demand that creameries and cheese factories buy cream according to quality. In 1910 the Butter, Cheese and Egg Journal observed:

The cheese factories are better off with respect to the quality of the raw material they take in for the reason that they cannot make cheese respectable in quality out of sour milk. Yet . . . , some of the cheesemakers think that "just one can, just this one time," will not do any harm and they dislike to have an argument with the patron on the merits of his milk compared with that of his neighbor or on the relative value of sweet and sour milk for cheese making. The cheesemaker thinks the milk will be better next time and so it is all right to overlook the sour milk just this one time. And so the evil advances.

The farmer is quick to seize the chance and thinks that if sour milk went all right yesterday, it will do today, tomorrow, and forever. Before the cheesemakers get any more lenient it is time to call a halt and "stand pat."⁸⁵

Creamery managers were also reluctant to reject spoiled cream for fear of losing patrons. Caven, of Chicago Dairy Produce, insisted, however, that "the creameryman who adopts a plan of grading cream and paying for quality stands to lose only those patrons who are giving him poor cream" ⁸⁶ Apparently creamerymen could not afford to lose that many patrons. In 1912 the Dairy Record decried a solution which creamerymen had devised to get rid of sour cream without offending farmers. Sandholt reported: "The buyers of the Twin City centralizers buy rejected and nearly decomposed cream, not only direct from the farmers, but from the local creameries which have found it unfit for making butter That the Twin City in the state which produces the best butter in the Union should be made the dumping ground for the rotten cream of the Northwest and their citizens be fed with butter made from such stuff . . . should receive the attention of state authorities."⁸⁷ The editors continued the campaign for buying by grade, but without notable results.⁸⁸

Meanwhile, the butter makers still turned out moldy butter. The several journals offered advice on how to prevent this defect. At the same time, farmers were urged to take better care of milk and to keep their barns clean. Both farmers and manufacturers were urged to wash milk cans carefully, and creamerymen told to keep flies out of the building.⁸⁹ Most of the advice had been given for at least twenty years past, and some of it had been urged since the War of 1812. If editorial reiteration meant anything, demands for cleanliness were largely ignored by farmers and creamerymen until state or national inspectors forced limited changes.⁹⁰

Cleanliness and the science of bacteriology continued to be linked by the editors. They observed that washed butter spoiled slowly and tasted better, that pasteurization killed tuberculosis germs, and that flies possibly spread infantile paralysis. By 1913 cheese starters were discovered to be unnecessary. Consequently all bacterial additions were proscribed by the editors, for cheese as well as for butter.⁹¹

Before 1905 the ice cream trade had received only incidental mention in the dairy press. The Ice Cream Trade Journal had been founded in 1905, but except for this venture, ice cream was largely ignored by dairy journals. After about 1912, however, dairy papers began devoting more space to ice cream manufacture and distribution. The New York Produce Review, the Pacific Dairy Review and the Butter, Cheese and Egg Journal were particularly interested in the confection. The last named even boasted of an "Ice Cream Department—Conducted by an Expert."⁹²

The editors usually urged creamerymen to use some of the abundant summer cream for ice cream instead of butter. The creameries could thus relieve the glutted summer market. The editors also pointed out the virtues of ice cream as a food and outlined methods of manufacture.⁹³ By 1912 ice cream manufacturers faced legislative control of butterfat standards. The Dairy Record thought some such standard reasonable, while the New York Produce Review believed that ice cream was a confection and was not necessarily supposed to contain butterfat. And as early as 1915 ice cream push carts were denounced because they allegedly threatened public health. The Ice Cream Trade Journal countered by ridiculing those bacteriologists who claimed to find microbes in ice cream.⁹⁴ Ice cream was obviously becoming more popular and more important for the industry.

Meanwhile, any discussion of marketing, buttermaking, war measures, or politics was liable to include complaints

about oleomargarine. Some oleomargarine dealers still endeavored to sell their product as butter. In 1910 the Minnesota Dairyman noted: "In the state of Pennsylvania the past year 95 per cent of the samples taken by the pure food department as purchased for butter proved to be oleomargarine."⁹⁵ J. Q. Emery, food commissioner for Wisconsin, reportedly asked: "Why do packers, if not wishing to conceal the origin of their product, so strenuously strive to associate oleomargarine with the dairy, which is not its true origin, instead of with the packing house which is its true origin? Why, instead of a wrapper with 'Jersey brand' or 'Holstein brand' or 'Guernsey brand,' 'country rolls,' etc., do they not use the picture of a packing house, which would suggest more truthful associations?"⁹⁶ The question went unanswered. In 1910 Chicago Dairy Produce attacked the St. Louis Post-Dispatch for asserting that all the public needed was protection from false labelling. Caven insisted that lower oleomargarine prices would destroy the butter industry, the dairy industry, and the nation.

As in the past, editors lobbied to prevent repeal of the Grout Bill; in 1910 Schilling of the Minnesota Dairyman led the fight. In 1912 the editors rose in a body to prevent the passage of the Lever Bill, which would have reduced the oleomargarine tax to one cent a pound for all varieties, colored or not.⁹⁷ In 1913 journalists protested government purchase of oleomargarine for the use of old soldiers, and in 1914 Saylor of the Pacific Dairy Review noted that manufacturers added natural Jersey butter to their product, thus introducing color, but not artificially. In this way the manufacturers sought to escape the ten-cent tax.⁹⁸ Thus the struggle dragged on.

Vitamins Aid in Battle on Oleomargarine

The discovery of vitamins was undoubtedly the most significant development in the fight against oleomargarine. Nutritional investigations had been carried on for some time. It was not until 1915, however, that E. V. McCollum of the Wisconsin Experiment Station proved that there were indeed striking nutritional differences between butter and oleomargarine.⁹⁹ In 1917 Hoard's Dairyman, in a special issue, announced the discovery and asserted that "there are only two unknown dietary essentials in milk and other foods." McCollum decided to reject the name "vitamine" first used by Funk and instead called them "Fat-soluble A" and "Water-soluble B." Hoard's special issue carried arresting pic-

tures of animals fed primarily on oleomargarine and those fed primarily on butterfat; butter clearly had an astounding superiority in nutritional value.¹⁰⁰ The other dairy papers picked up the information and relayed it to their readers. For years the editors had insisted that oleomargarine was inferior to butter. McCollum's discovery was merely accepted as proof that the journalists had been right all along. Except for Hoard's "Extra," the dairy press did not respond to the news very enthusiastically. Moreover, the general public was apparently more impressed by the cheapness of the substitute than by its nutritional deficiencies.¹⁰¹

Meanwhile oleomargarine manufacturers continued to agitate for repeal of the Grout Bill. To do this, they attempted to secure favorable publicity for themselves. In 1917, Caven of Chicago Dairy Produce reported:

The rural newspapers of the country have recently become remarkably active champions of legislation favorable to the repeal of the oleomargarine tax. Their editorial pages in particular have blossomed forth with flowers of eloquence worthy of the pen of a Greeley or Brisbane. These same editorials show a profoundness of logic which would do credit to our greatest lawyers. And, in all seriousness, we must acknowledge that they have not been without effect.

But the wonderful part of it is that these country editors should so suddenly show signs of genius which they have heretofore kept hidden from the world. With all due respect to the rural press, we must admit that we never suspected that it harbored such an array of talent. And it is a remarkable fact that the opinions of these leaders of rural thought should coincide so exactly. In Minnesota, Kansas, Ohio and elsewhere, the same ideas and arguments have spontaneously been generated.

When we see upon the same page such a gem of thought side by side with a news item telling that Barney Jones has went to the city for a spell, we are mystified. We cannot understand this splendid defense of the down-trodden oleomargarine manufacturer. Where does this inspiration come from? ¹⁰²

Wherever it came from, it was not successful in 1917.

Battle of the Breeds Continues

Breeders continued to quarrel as violently as ever. Breed journals contained editorial complaints about the length and

complexity of Holstein names, information on the Jersey herd of a Franciscan monastery, and similar bits of information.¹⁰³ The most important innovation in breed promotion, however, was the circulation of a motion picture entitled "Love and the Jersey," first reported in 1917 by the Jersey Bulletin. The American Jersey Cattle Club later made other pictures designed to promote the breed. The effort was novel, but was not immediately copied by other breeders.

There was little evident animosity between Jersey and Guernsey breeders, possibly because Holsteins offered enough competition to force solidarity on the island breeds. In 1910 the Guernsey Breeders' Journal and in 1912 the Jersey Bulletin commented on the splendid showing of their breeds at the Columbian Exposition of 1893.¹⁰⁴ This harking back to past glories was evidently an attempt to discredit the Holsteins, which had not been entered in that test.

By 1910 editorial advocates of dual-purpose cattle had disappeared. In 1914, however, James J. Hill proposed to develop a dual-purpose cow. The Pacific Dairy Review merely observed that the statement indicated that a dual-purpose cow was still to be found, while the Minnesota Dairyman thought Hill should have found the proper breed by 1914, since he had been working on the idea for thirty years.¹⁰⁵ On the whole, dual-purpose advocates were treated with quiet contempt.

Meanwhile, the general dairy papers encouraged farmers to improve their stock. The journals carried histories and descriptions of the various breeds, probably to excite general interest. Coöperative ownership of sires came into especial prominence after 1913, but editorial comment indicated the idea was still not widespread. Nevertheless, the movement offered an inexpensive way of raising the quality of dairy cattle without undue expense for farmers.¹⁰⁶

Genetics Ignored by Editors

The science of genetics was largely ignored by the journalists. Hoard was the first to use the word "genetics," but the article in which it appeared did not explain the new science. On the whole, antagonism between breed advocates remained as bitter as ever, while actual advances in breeding were limited to a start at coöperation and some new but unpublicized experiments in genetics.¹⁰⁷

Innovations in feeding were no more startling. Editors noted with interest the development of spineless cactus by

Luther Burbank, and in 1914 the Pacific Dairy Review urged the use of "brown cured" or "stack burned" alfalfa hay. Of this innovation Saylor remarked: "We are pleased to see another instance where science supports a new practice worked out on the farms. We ourselves have had an opportunity to observe the apparently better feeding quality of this class of alfalfa hay and have looked forward to seeing the method secure scientific sanction."¹⁰⁸ Editorial feeding advice centered on the use of silos. Every editor cajoled, begged, urged, and demanded that his readers either build silos or, in the case of trade journals, have patrons build silos.¹⁰⁹

In veterinary medicine, editorial attention centered on tuberculosis, contagious abortion, and foot and mouth disease. Several editors were distressed to discover that state veterinarians certified animals to be tuberculosis-free if the cattle were to be shipped out of the state. The journals also repeatedly denied that the tuberculin test caused the disease. Stanton and Houghton asserted that the fear of spreading bovine tuberculosis to humans was greatly exaggerated. In 1917 Hoard noted that far from being subdued, tuberculosis was actually spreading in Wisconsin. He vigorously supported systematic eradication of the disease and suggested that all states do the same.¹¹⁰ The campaign for complete eradication became the chief preoccupation of Hoard's Dairyman.

Although some editors opposed the slaughter of tubercular cattle, even more opposed slaughter as a solution for foot and mouth disease. The breed journals were particularly caustic about the allegedly crude methods of state and national health officers. Journals also complained that quarantine rules issued by the Department of Agriculture were not wholly reasonable and that in many cases the department acted only after the disease had spread too far. Breeders felt persecuted because quarantines kept them from sending breeding stock to various sections of the country.¹¹¹

The microbe origin of abortion was universally accepted by 1915, although the press did not indicate any suspected connection between undulant fever and bovine abortion. In contrast to past periods of dairy journalism, no cures were offered for abortion, but cleanliness and sanitation were urged as powerful preventives. The exceptional outbreaks of 1917 and 1918 created wide editorial interest in the subject. There was no precise knowledge on how the disease

spread, and lacking a known connection with human ills, no editorial recommendation that the disease be quickly eradicated. That campaign was yet to come.¹¹²

On the whole, the dairy journals reflected the common social and economic ideas of the time. The papers dealt with such varied social problems as prohibition, censorship, industrial and farm safety, and comfortable farm living. Each of the subjects was handled from a dairying standpoint, but the general approach paralleled popular attitudes. The economic information carried in the journals was widely varied, but foreign commerce and the tariff excited the most comment. The First World War also interested editors, primarily as an opportunity for profit. The war also altered attitudes toward labor, and began a definite split between farm and technical journals. Farm journals wanted greater government assistance to farmers; trade journals wanted less assistance of any kind. By 1918 the editors had clearly shifted their primary attention from technical to economic problems. The old programs of breed improvement, cleanliness, and disease eradication were still emphasized, but even greater attention was given to marketing. In the twenties the editors concentrated on promotion of dairy products. During the same period, more government regulation of quality and increased farmer demands for some sort of price support brought the several editors into conflict with government and one another. Consequently, after 1918 editors increasingly demanded that government either get in or out of business. Marketing and promotion, complicated by ever increasing government intervention in the dairy industry, overshadowed editorial interest in technical progress.

Chapter II - Agricultural Depression 1919-1929

Many House Organs for Coöperatives Appear

Thirty-seven new dairy periodicals appeared between 1919 and 1929, most of which were house organs for coöperatives. In the order of their appearance, these new periodicals were: the Connecticut Milk Producers' Association Bulletin, of Hartford; the Milking Shorthorn Journal, of Independence, Iowa; the Michigan Milk Messenger, of Fowlerville; Dairy and Stock Ranch, of San Francisco; American Association of Creamery and Butter Manufacturers, of Chicago; Produce Packer, of Kansas City, Missouri; Federation Guide and Market News, of Plymouth, Wisconsin; Red Polled Journal, of Minneapolis; Southern Dairyman, of Montgomery, Alabama; Inter-State Milk Producers Review, of Philadelphia; Co-operative Dairy Farmer, of Wauseon, Ohio; Dairy Journal, of Portland, Oregon; Brown Swiss Bulletin, of Beloit, Wisconsin; Ice Cream Field, of New York; California Dairyman, of Paramount; Dairy World, of Chicago; Land O'Lakes News, of Minneapolis; Breeder and Dairyman, of Harrisburg, Pennsylvania; Dairy Farm Leader, of Chicago; Cheesekraft; Washcoegg, of Seattle; Dairy Goat Journal, of Ensign, Kansas; Dairyman's Review, of Cincinnati; Dairy Products Merchandising, of Detroit; Milk Goat News, of San Francisco; Cow and Hen Journal, of Palmer, Kansas; California Dairy News, of Sacramento and Fresno; Certified Milk Magazine, of New York, American Creamery Operator and the Milk and Ice Cream Plant, of St. Paul; Pure Milk Magazine, of Chicago; Denver Milk Market Review, of Colorado Springs; Milk Producers Review, of Peoria, Illinois; Southern Dairy Products Journal, of Atlanta, Georgia; Eastern Milk Producer, of Cobleskill, New York; Southern Dairyman, Atlanta; Confectionery and Ice Cream World, of New York; and the Southern Dairyman, of Shreveport, Louisiana.¹

After 1919, six of the older papers ceased publication and another six changed title or publication frequency. The Elgin Dairy Report died in 1922, the Milk News in 1927, the Holstein-Friesian Register and the Milk Reporter in 1928, and the Dairy Farmer in 1929.² In the same period, Chicago Dairy Produce changed title to Dairy Produce, while Hoard's Dairyman changed to a semimonthly in 1926.³ These changes suggested hard times for dairy journals and for the industry.

Farm Depression Discourages Editors

Between 1919 and 1929 and long after, the farm depression dominated the thinking of most of the editors. In 1920 the butter market was described as being in "a deplorable condition." By 1922 the Pacific Dairy Review could observe: "Farm crops have suffered a shrinkage of over thirty per cent in value since the ending of the war and on some of them over fifty per cent. When the things farmers need and want undergo a similar shrinkage farmers will begin buying. This is not a buyers' strike; it is an impossibility."⁴ The breed journals also admitted that there was a depression somewhere, but they reported more cattle sales at higher prices and increasing prosperity for breeders. The breed editors, nevertheless, advocated more government help for farmers. In 1925 the Holstein-Friesian World found that "all is not well on the farm." But the editors still insisted that the breeding business was good.⁵ By 1927, however, the depression overtook the breeders. As the Dairy Farmer explained:

Some purebred breeders today are the object of ridicule by their grade cow neighbors. In many cases this ridicule is unjustified but in far too many cases there is reason for it. The grade cow man has culled closely in these cases while the purebred man hesitated to do so on account of the value of those registration papers. As a result he has a lot of scrub purebreds in his herd and they are holding him down.

.....

When all purebred breeders do that [culling] the value of purebred dairy cattle will be appreciated and they will be paid for accordingly.⁶

Meanwhile, the cleavage between farm and manufacturing journals became more pronounced. Assistance was one thing, but subsidy was another. The New York Produce Review raged over the McNary-Haugen Bill in 1924:

To any person who can intelligently observe the nicety with which trade laws ultimately regulate production and consumption, who can understand their workings and their beneficence to the community as a whole, who can appreciate the fundamental necessity of building a nation's commerce in accordance with them in any government that aims at individual liberty and the freedom of opportunity, it must be amazing that such revolutionary propositions as these should be seriously considered by legislators. The laws of trade, like physical or even moral laws are unyielding masters. It is an attribute that lies at the foundation of human welfare and progress. To those who understand them and conduct themselves and their business in accordance they bring prosperity and happiness or satisfaction; to those who violate them or deal in ignorance of them they bring greivous penalties. It is in the very nature of things that this should be so. Any attempt to stultify the natural effects of over-production by the interposition of legislation for an artificial maintenance of prices at the expense of the people would clearly put our production facilities and personnel upon a continuously unhealthy basis and destroy dignity in government. ⁷

Haugen later included butter in his bill. Nevertheless, the New York Produce Review continued to attack the idea of any farm relief and in 1929 opposed the Federal Farm Board.

After 1926 conditions reportedly improved in the dairy industry. In 1926 the journals reported relative prosperity for the dairy industry, and in 1927 the Northwest Dairyman and Farmer made the customary claim for the stability of dairy farming: "The dairy sections of the United States have been experiencing a rather prosperous period for several years, and that at a time when most other sections of the country were suffering from one of the worst depressions American farming has ever experienced. Evidence of prosperity in dairy sections is to be seen wherever dairying is an important feature of farming."⁸ This picture of prosperity was somewhat disturbed by milk strikes (the refusal of farmers to sell or allow others to sell milk to processors) which broke out from 1927 to 1929. Dairy Produce dismissed these disturbances as local and temporary, and in 1929, shortly before it closed publication, the Dairy Farmer insisted that dairy income was the greatest in the history of the industry. In 1929 the Jersey Bulletin and

Dairy World noted the "Rampage of the Stock Markets," but made only limited comment. Writing of the farmer, the editor merely observed: "It will take more than ballyhooing or boosters to remedy his situation."⁹ The farm depression lingered on. In response to the depression, the dairy editors advocated the adoption of the doctrines of cheerful enthusiasm, hard work, and coöperation among businessmen. The editors seemed to believe that these and similar virtues would correct all evils of the age.¹⁰

Editors Quit Interpublication Quarrels

In 1927, Guy Richards of the Northwest Dairyman and Farmer quoted:

Bite off more than you can chew,
Then chew it.
Plan for more than you can do,
Then do it.
Hitch your wagon to a star,
Keep your seat, and there you are. ¹¹

Editors also stressed the importance of enthusiasm and proclaimed the end of "cut-throat competition."¹² And indeed, interpublication quarrels did end. They were replaced by a friendly solidarity which was usually directed against the government.

Editors also suggested ballyhoo and boosting as techniques for increasing sales during the depression. The dairy journals were more restrained than other promoters, but nearly half of the articles on marketing dealt with promotion of dairy products. In 1919 Chicago Dairy Produce denied that storage dealers were hoarders; the paper asserted that the public had to be informed of the difference between speculation and service. In 1919 both the Milk Reporter and the Jersey Bulletin tried to promote greater use of condensed milk. The papers asserted that evaporated milk was healthful and would not cause scurvy or rickets. Stanton also urged the use of more milk products, including ice cream, cottage cheese, butter, and buttermilk. Editors noted and approved the free advertising milk received from scientists.¹³ The Pacific Dairy Review even proposed a campaign of demanding more dairy products in restaurant menus. As the editor suggested:

The butterless sandwich should be relegated to oblivion and it can be if those who are interested in the prosperity

of the dairy industry take a hand in the war against it. Order your sandwich with butter on it and insist that it shall be liberally spread and if not turn it down with a "kick" that will be heard by other diners. It will mean a big increase in the consumption of butter.

But don't stop at protesting against the butterless sandwich. There are other opportunities in almost every public eating place in the land to promote a larger consumption of dairy products. Recently we referred to the absence of cheese with the apple pie. Then there are your coffee and mush which are almost invariably served with milk—sometimes skimmed-milk at that—instead of cream. "Kick"; you are paying for cream. "Kick" at the microscopic portion of butter served with your meals.¹⁴

Promotional devices took other more unusual forms. One paper hinted that a prohibition resolution proposed in the state legislature of Pennsylvania was designed to promote the use of buttermilk. The representative who offered the bill objected to the alcoholic content of the drink.

Sees Need for More Advertising

The Holstein-Friesian Register objected to the competition offered by carbonated drinks. The editor believed that if milk were sold as prominently as soft drinks were, milk consumption would increase tremendously.¹⁵ All that was needed was more advertising. The Minnesota Coöperative Creameries Association, later called the Land O'Lakes Creameries, demonstrated that promotion could popularize sweet cream butter. The New York Produce Review believed similar efforts would be effective for any dairy product. Coöperation, however, was believed to be the key to advertising success in the disunited dairy industry. In 1924 the Dairy Record approved and tentatively advocated the further use of a technique worked out by ice cream manufacturers in Grand Rapids, Michigan. There the dealers had pooled their advertising funds, and concentrated on a joint campaign to "sell the ice cream idea."¹⁶ In New England, it was reported that Grade A milk sold better in 1929 than in previous years because of the salesmanship of the leading milk dealers. Throughout the industry, trade editors emphasized selling and advertising as the key to prosperity.¹⁷

Not all of the promotion was industry inspired. In 1927 the Ice Cream Trade Journal carried an article entitled "What The Public Has Been Reading About The Produce In

This Year's Newspapers and Magazines, What It used to Read And What The Change Means to Members Of The Industry."¹⁸ And in 1928 the Pacific Dairy Review reported under the title "Milk—The Builder":

That is the headline which appeared over a full page advertisement in a weekly magazine of national circulation. And while the advertisement was one of the finest arguments for milk imaginable, the \$4,000 or more which this single insertion cost was not paid by any dairy company or dairy organization. The advertisement was by a great life insurance company—the Metropolitan—which of course has no milk to sell. The life insurance company is not interested in milk but in longer life. And when a distinguished group of sound conservative business people is convinced that the way to prolong human life is through adequate use of milk, that fact alone is of tremendous value to the dairy industry.¹⁹

The editors were clearly enheartened by this and similar free publicity.

Chain-Store Methods Criticized

Aside from promotion, editors also discussed such diverse marketing topics as rentals on milk cans, cost of distribution, market prices of condensed milk, and increased consumption of Swiss cheese.²⁰ In 1925 the Creamery Journal was pleased to find that the quality of western cream had improved so much that it was being shipped to the East in carload lots. The editor observed that this trade indicated there was no overproduction in sweet cream.

In 1928 Dairy Produce launched a campaign of its own against the chain stores. Other papers occasionally complained about chain stores, but Caven was particularly opposed to the price cutting tendencies of A&P, Kroger, and others. Apparently chain store competition encouraged diversification in the processing of dairy products. Dairy Produce reported in 1928:

A veteran subscriber to Dairy Produce writes as follows: "I believe the time has come when local creameries in towns of any size in order to get their share of the home trade on butter will have to sell direct to the homes and not through the grocer. The towns are being filled up with chain stores who do not want to have the same brand of butter each week, but teach their trade to

buy whatever is offered. In this way, they can scout around and hunt up some cheap butter regardless of quality, run special low prices, and thus draw customers." This creameryman is seriously considering getting into the milk business as a means of securing direct distribution of his butter.²¹

As before, the editors pointed out that it was difficult if not impossible to market inferior dairy products. Previously editors had opposed adulterations, but by 1919 the papers faced the problem of fat standards for butter. From 1919 to 1923 editors insisted that butter contain at least 80 per cent butterfat and that these standards be accepted by the industry before Congress took a hand.²² At the same time the journals insisted that creameries produce more high-grade butter. In 1922 the Pacific Dairy Review advised merchants to adopt the policy of the breeders and call names. The editor wrote:

There is a whole lot in a name—in a bad name as well as in a good one—and we are inclined to believe that the term "scrub" has had a whole lot to do with the undoing of the mongrel bull. The word doesn't sound good. For an owner to be told that his herd sire is a "scrub" and that he gets "scrub" cows kind of gets under the thickest skin.

And now that we see that the term "scrub" has worked so well on dairymen, why not make further use of it? Someone has suggested "scrub" butter for that kind of low grade butter of which this country produces too much. And come to think of it, the term could be quite appropriate. "Scrub" butter is made from cream produced by "scrub" dairymen—or should we say from dairymen who don't scrub enough—from "scrub" cows. It follows as a natural sequence. Our butter might be commercially graded, for example, as extras, firsts, and "scrubs." We can imagine that a creamery getting returns for "scrub" butter would get somewhat of a jolt.²³

The suggestion was not taken seriously by the industry.

While farm income declined, the editors continued to cling to orthodox economic ideas. Of supply and demand, Hoard's Dairyman remarked: "It is a well established fact in the production of dairy products that when the prices for them become good there is an increased production."²⁴ As before, the journals accepted the theory that competition

must be free and that there should be a minimum of government supervision of the market. On this point Glover expressed the general opinion when he wrote in 1921:

If we are to have the Adamson Law, which proposes to regulate the hours of labor and the wages of railroad employees, there naturally follows another law such as the Esch-Cummins to so regulate the freight and passenger rates as to give a reasonable return on investment.

.....
Railroads have so much to do in determining industrial prosperity and regulating economic conditions that we can not escape from having a certain amount of government regulation. This is in the interest of the people of the country as a whole, including the railroads themselves. Despite this, we believe the Adamson and Esch-Cummins laws go too far in regulation. They should both be amended or repealed.²⁵

In specific instances, however, economic theory was put to one side. The Northwest Dairyman and Horticulturist blandly reported whole milk price fixing for the Seattle area and protested only that the price had been fixed too low. On this sort of marketing association Glover remarked only that "if anyone feels it is possible to make scrub herds profitable through organization, it is time he realized his mistake." The editor did not otherwise condemn such attempts to fix prices.²⁶

On the whole, editors feared the formation of dairy trusts, although some, like Stanton, believed that the battle was nearly lost. He remarked in 1926:

Every week of late brings continuous rumors of more consolidations of dairy and by-product concerns, all over the country, especially in the large financial centers.

.....
Naturally, these moves by the financiers have caused some excitement among the producers of New York and adjoining states and are causing meetings to be held in different sections. What can be done? It is one of the economic movements of the time. The only thing in sight is a counter organization among the farmers. This would involve an organization of farmers in every state where supplies are secured. The source of supply is always from the farmers. But the farmers never would "stay put" and their weakness in this respect has always been known in the trade.²⁷

In spite of this editorial pessimism, farm coöperatives increased remarkably during the twenties. Special legislation was secured to exempt them from the antitrust laws.

Meanwhile, the battle between centralizers and coöperatives continued. In 1925 the Dairy Record rejoiced when the Minnesota Supreme Court upheld a law which made it illegal for creameries to pay higher prices for butterfat in one community than another. The legislation obviously hampered the efforts of centralizers to drive out competition. In 1926 some effort was made to join coöperatives in Wisconsin and Minnesota in marketing butter, but the plan failed. The editor of the Butter, Cheese and Egg Journal noted: "This should be pleasing news to opponents of cooperative marketing." Laissez-faire competition was given lip service by the editors, but in fact the only successful weapon against consolidation seemed to be counter consolidation.²⁸

Although editors often attacked government assistance to other industries or to labor, the dairy journals were not opposed to demanding help for their particular branch of the industry. In 1923 the New York Produce Review and American Creamery approved the assistance which the Bureau of Agricultural Economics gave the National Poultry, Butter, and Egg Association. As the editor remarked: "No more attentive or interested consideration of suggestions for the improvement of the reports of cold storage holdings of dairy and poultry products could have been expected or desired."²⁹

Concurrently, the farm journals sought greater assistance for producers. In 1927 the Dairy Farmer complained that:

Our federal lawmakers are not fulfilling their obligations to agriculture. We need only to realize that each year congress appropriates \$4.65 for every man, woman and child in the United States for national defense and only a little over ten cents for all research and extension work in agriculture to know the truth of this statement.

Congress spends 54 cents a year for every inhabitant of the country in promoting marine transportation and less than half a cent per capita in improving dairying, the greatest branch of the greatest industry on the continent. We are not criticizing a merchant marine one way or the other but we do say that things are badly out of balance. It is time to give credit where credit is due and spend the taxpayers' money where he would have it spent.³⁰

In common with most Americans of the time, the dairy

editors opposed competition from foreign producers. Generally editorial attention centered on butter imports, which the Pacific Dairy Review insisted were dumped on America in preference to ruining the English market. In particular, the Danes, Dutch, and Australians were accused of dumping. Editorial opinion on the virtues of any particular tariff varied, but the dairy journals did adhere to the principles of high protection for agricultural products and low tariffs on manufactured goods.³¹ The common theory of tariff rates was best expressed by the Pacific Dairy Review in 1922: "Tariff schedules are practically altogether a matter of organization. The best organized industry comes nearest to getting what it demands" ³² There was, however, some disagreement on what should be demanded. In 1925, the Dairy Record asserted that there was no benefit in a tariff, while in 1926 Hoard's Dairyman declared that there was. In 1929 Dairy Produce opposed the McNary-Haugen price support plan. Caven suggested that if American farm produce were to be dumped abroad, as the plan proposed, Canadian and other farmers would obtain cheaper feed and thus probably ruin American dairy farmers. The article did not explain how Canadian dairy products would get in over the tariff wall.³³

The high tariff on dairy products was often used by manufacturing interests to demand similar protection. In presenting arguments for a tariff duty on cream separators, the New York Produce Review observed:

Under the present duty cream separators are on the free list; and why they should be if other similar industry is to be protected, it is impossible to comprehend. If cream separators were "agricultural machinery" there might be a semblance of an excuse as a gesture of advantage to producers of agricultural products who must sell a surplus abroad at world price levels. But cream separators are sold to a tariff protected industry—the dairy industry—and to an industry which itself is asking for still higher protection. If then the dairy industry arguments for needed protection are sound how much sounder is the argument that American cream separator manufacturers and their employees are entitled to a full share of protection from foreign competition.³⁴

The editor then added his clinching but, for the industry, irrelevant argument: "The argument of consistency alone should be sufficient to remove this injustice" ³⁵

Discovery of Vitamins Encourages Editors

In contrast to their interest in the tariff, editors were not greatly concerned about oleomargarine competition. This relative complacency seemed to rest on confidence in the discovery of vitamins. In 1919 Chicago Dairy Produce asserted:

Dr. McCollum has placed the dairy industry before the world in a new light. He has taken it from a precarious position where it was threatened with destruction by alleged substitutes for butter, and placed it on the firm foundation necessary.

.....
He has turned the best thought of the world toward dairying and awakened in the minds of progressive thinkers plans for improving and extending the industry. A few years ago it could be said, without anyone seriously questioning the statement, that dairying had no future; but such a statement cannot be made today. Late discoveries have given dairying a limitless future in a field all its own.³⁶

Nevertheless, oleomargarine did not succumb to vitamin propaganda. During the depression even farmers used oleomargarine. In 1921 Guy Richards of the Northwest Dairyman and Farmer noted this development and demanded local legislation to tax the substitute out of existence. In spite of editorial pressure, the farmers apparently continued to use the substitute. In 1927 Richards asserted that the depression was not severe enough to force farmers to use oleomargarine. He declared that farmers who bought oleomargarine did so "not from necessity, but from greedy selfishness...." In 1922 the Pacific Dairy Review complained that when the price of butter went over fifty cents, substitutes immediately appeared, thus depriving farmers of the higher prices.³⁷ However viewed, the oleomargarine problem persisted. It is also interesting to note that most of the protest came from the Pacific Coast.

Vegetable oils gradually replaced animal fat in the manufacture of oleomargarine. The editors, therefore shifted their attack from lard to vegetable oil. In 1926 the Pacific Dairy Review remarked of oleomargarine: "The main ingredient is cocoanut oil, reduced from copra, the dried pulp of the cocoanut. And, in passing, were you ever to windward when a cargo of worm infested copra from the South Pacific

Islands arrived at a Pacific port?"³⁸ In the battle against oleomargarine the New York Produce Review even had a few kind words for the centralizer. The editor wrote: "There is, of course, no relation whatever between the increase in production of oleomargarine and the decrease in the output of our process butter factories. These depended upon farm made butter the production of which has rapidly dwindled as the centralizing system of butter manufacture has developed. It was the centralizer, not the butter substitute, which drove process butter from the American table."³⁹ In 1928 editorial attention was diverted from oleomargarine to cooking fats, which the editors claimed were often sold as butter. Furthermore, cooking fats competed with lower grades of butter for shortening. The editors demanded that the product be taxed the same as oleomargarine. And a new adulterated product, filled milk, threatened the industry around 1920. The product consisted of skim milk to which vegetable fats had been added in lieu of cream and the whole condensed. From 1920 on, the editors denounced what they asserted was a new and dangerous fraud, and by 1922 legislation against the product was under way in Congress.⁴⁰

Editors Attack Freight Rates

As in past agricultural depressions, the editors quickly assailed the railroads. In 1920 the Holstein-Friesian World claimed that the railroad car shortage was a myth and that it was actually caused by letting cars stand empty too long. The editor insisted that the roads improve service. In 1921 Glover of Hoard's Dairyman presented a program of economic reform which hinged on lower railroad rates. He wrote: "One of our subscribers writes: 'We want a substantial reduction in freight rates, passenger rates and a corresponding decrease in wages. Then there should be started a campaign to reduce rents, retail prices, etc.' Is this not a good farmers' program? It is a good program for all people. We cannot proceed on the road to normalcy with the present high freight and passenger rates and wages all out of proportion to what the farmer's products are bringing in the market."⁴¹ Glover returned to the subject later in 1921, demanding reduced rates and efficient operation. In 1922 the Dairy Farmer joined the fight and insisted that freight rates and farm prices were out of joint. In contrast, the butter and cheesemaker journal, the Dairy Record, praised the railroads in 1924 because they were interested in having

prosperous farmers along their routes. There was obviously some difference of opinion between farm and technical journals.⁴²

The dairy journals no longer advocated the use of the automobile. Between 1924 and 1926 editors sometimes suggested glucose or honey as an antifreeze, but apparently alcohol proved more effective. The editors also urged federal aid for the construction of roads capable of carrying truck traffic. With the wider use of trucks and automobiles which these items suggest, the editors became less interested in railroad rates or mismanagement. After 1929 complaints about the railroads became virtually nonexistent.⁴³

Local Conditions Affect Attitude of Labor Unions

As before, attitudes toward labor unions were exhibited only incidentally. The editors still objected to union activity, although not as strenuously as before. Even the farm papers were not as antagonistic as formerly, although the position any editor took depended largely on the circumstances surrounding the incident he reported. As the Butter, Cheese and Egg Journal explained in 1920:

Things have changed and employers of labor, whether skilled or unskilled, must take this change into consideration for it would seem safe to say that labor is slated for a larger share of the products of its labor than has been the case heretofore.

The cheesemakers of Wisconsin, and no doubt other States as well, are just as vitally interested in this question as the buttermakers, although their wages take the form of payment at so much per pound. Cheese factory patrons are just as adverse to having the rate per pound increased as creamery patrons, and where they formerly got their cheese made for 1-1/2¢ per pound it would seem to be clearly demonstrated that they must pay at least 3¢ per pound to the maker in order that he may come out whole.

Wisconsin buttermakers are agitating the matter of an increase in wages and we are in favor of united action being to accomplish that result, and we do not believe it necessary to affiliate with any labor union to accomplish it either.⁴⁴

As before, farm and technical journals differed in their approach to labor problems. The trade journals, for example, opposed milk strikes, while the dairy farm papers

remained silently noncommittal on the subject. In these instances the dairy farm journals did not care to denounce strikes, even though the principles behind a labor strike and a milk strike were essentially the same. The nearness of the two was indicated by Dairy Produce, which chidingly reported in 1929: "Farmers are trying to enlist the help of organized labor to prevent deliveries of milk."⁴⁵ It appeared that although neither farm nor trade journals approved of labor unions, the producers or processors were willing to use them in order to check one another. Thus the creamerymen were urged to organize and force concessions from farmers, while farmers attempted to secure the help of unions in forcing concessions from processors and merchants.

Editors touched on a variety of social problems. There was no unanimity of opinion, but articles on the immigrant problem and Americanization reflected popular concern about these subjects. Meredith of the Dairy Farmer asserted that English was the universal language. The claim was a symbol for American self-reliance. For the first time women and children were seriously discussed in the dairy press. In 1922 the Pacific Dairy Review claimed that the farm woman was happier than the city woman, and in 1926 Hoard's Dairyman advocated an increase in 4-H work.⁴⁶

Introduce Woman's Page in Dairy Journal

In 1915 the Live Stock and Dairy Journal of Sacramento carried the first woman's page to appear in a dairy journal. By 1926 this effort had been followed by Hoard's Dairyman and, in 1927, by the Northwest Dairyman and Farmer. Generally the columns were composed of lifted articles. Many were subsequently begun by other journals, but few endured any length of time.

Another sort of column was previewed by the Jersey Bulletin which, beginning in 1924, occasionally ran rather unworthy articles on boy and girl calf club activities.⁴⁷ The youth page, however, did not appear until after 1929. Meanwhile, the editors criticized the educational system. The Northwest Dairyman and Farmer declared: "Teaching the boys how to curry horses and harrow and plow, and instructing the girls in cooking and sewing isn't the sole function of the agricultural college. The boy and girl on the farm is entitled to the opportunity to get just as much out of life as the boy or girl raised in the city and trained for the so-

called "white collar" jobs. Just as a liberal education makes a better lawyer, doctor, or minister, so the farmer with a liberal education is better equipped for the big job of helping feed the rest of the world." ⁴⁸ The youth page, when it appeared, was apparently intended to supply that inspiration which the editors thought the colleges neglected.

The dairy press devoted little space to prohibition after the eighteenth amendment passed. On the whole, papers intended for farmers supported prohibition, while trade papers were critical of the law. In 1926, for example, Guy Richards lifted an editorial from a general farm journal which stated in part: "The fact that many persons go insane or die as a result of drinking moonshine should not be charged to prohibition. Thousands of persons were attacked with insanity every year as a result of drinking booze in the days of the open saloon."⁴⁹ In contrast, the Butter, Cheese and Egg Journal of 1926 reported that prohibition was not an unqualified success. Slater observed that:

While the prohibition law may have increased the demand for milk and milk products it has, we believe, been a contributing factor in delaying improvement in the cream supply in many sections of the country. It has intensified competition, especially in those sections where the centralizer creameries predominate.

Money that was invested in the brewing and distilling of liquors sought new fields and the dairy products manufacturing field proved alluring. Money, buildings and equipment formerly used in brewing beer is now used in producing manufactured dairy products. This, of course, has created keener competition for the men and institutions in the business. Students of competitive practices in the creamery business will agree that these practices are retarding progress along quality lines. The creameryman who pays more money than he should for poor cream does so because he is afraid of his competitors.

It would be unfair to the men who are now in the creamery business or the milk bottling business, or the ice cream business, or the cheese business, and who formerly were in the liquor business, to single them out and blame them for present competitive conditions. They have introduced nothing new in the way of bad practices. They did, however, bring millions of new invested capital into the dairy products manufacturing field and they, along with others, have had to protect investments the best they could.⁵⁰

The trade editors did not directly attack prohibition, but they did begin to question its wisdom

Editors also approached a variety of other problems ranging from radio interference to keeping dogs on dairy farms. In addition, the journalists exhibited a new interest in the history of various phases of the industry. The Pacific Dairy Review carried a history of ice cream, the Guernsey Breeders' Journal commented favorably on a history of cattle, and Dairy Produce ran an article on the history of the cream separator. And there were other similar articles, all indicating a curiosity about the past which was rather unusual.⁵¹

As before, standard columns carried special information. Short reviews of technical works appeared under such titles as "FROM EXPERIMENT STATION RECORD," while other columns were variously entitled "CHEESE DEPARTMENT," "PRACTICAL BUTTER MAKING," or "CREAMERY OPERATION." The information was rarely detailed and was generally restricted to maxims and exhortations.⁵² Detailed explanations were generally left to experiment station bulletins. As E. K. Slater of the Butter, Cheese and Egg Journal explained in 1926: "There was a time when we got paid for telling buttermakers what methods to follow in creamery practice. We honestly feel that the only ones we ever influenced were the younger fellows who hadn't started nursing pet theories of their own."⁵³

Most journals also carried a correspondence section and often special columns devoted to answering questions. The Dairy Farmer, and later other journals, ran a brief summary of its best articles near the masthead. Editors also collected various farm topics under titles such as "The Poultry Yard."⁵⁴ Occasionally these departmental efforts got out of hand. In 1926 Glover, of Hoard's Dairyman explained: "For several years we have been devoting a number of columns of each issue of Hoard's Dairyman to news from cow testing associations. We believe this has been helpful as advertising their splendid work, and from the number of letters received we are convinced it has been of interest to large numbers of our readers. Indeed, so great has been this interest that we are now receiving monthly reports in such volume that it taxes our capacity to print them even when edited and greatly condensed."⁵⁵ The editor asked for reader opinion on the proposition of dropping the column. Apparently there was no great protest when this was subsequently done.

The national journals also took on some of the aspects of the country weekly. The dairy papers ran short paragraphs on personalities in the industry, local gossip, and similar items, generally under some title like: "Little Stories of the Industry and its People . . ." In 1923, for example, the New York Produce Review noted, under "PERSONAL AND OTHERWISE": "** E. Blosser of City Produce Exchange, Harrisonville, Va., has been visiting the New York market. Mr. Blosser is interested largely in the Thanksgiving turkey market and also in the storage egg deal."⁵⁶ Items of this sort were apparently designed to meet the continuing pressure from small local dairy papers.

In 1924 and 1925 foot and mouth disease appeared in the United States. The dairy press followed the outbreaks carefully and supported government action to suppress the disease. At the same time, interest in contagious abortion continued, but the editors did not urge any program for eradication of the disease.⁵⁷

Editors Campaign Insistently against Tuberculosis

The most significant problem in veterinary medicine continued to be the fight against tuberculosis. As before, the editors denounced trafficking in infected animals and supported intensive programs to eliminate the disease from counties or states. Shoemaker of the Creamery Journal advocated tearing down barns which had housed diseased animals, while Glover warned farmers not to experiment with tuberculosis vaccines. Glover also lobbied for more government help in eradicating the disease.⁵⁸ In spite of continual editorial campaigns and widespread urban demand for eradication, some farmers opposed slaughter of diseased animals or even testing of cattle. One farmer wrote to Hoard's Dairyman: "I'm returning your paper and all other farm papers as all Northern Illinois farmers should do when a farm paper is working against them, as you did in this tuberculin testing propaganda that there is no sense in. You know, as well as I do, there are lots of other things in the large cities that cause T.B. a thousand times worse than the milk our country children are drinking from the cow and there is no T.B. in them either. We have eight of them and ought to know, so don't send your paper any more."⁵⁹

Similar opposition appeared from time to time, but testing and eradication plans went forward fairly rapidly after 1926. Part of the impetus came from urban action. By 1927, 874 cities and towns in the United States prohibited the sale

of milk from cattle which had not been tested. From 1927 on, editors drew attention to the status of tuberculosis testing or eradication. Titles such as "ONE MILLION IN MARCH—Highest Record in Testing Cattle" became common, while appeals for farmer coöperation largely disappeared.⁶⁰ Perhaps, as the editor of the Northwest Dairyman and Farmer suggested in 1929, the farmers were impressed with the increased per capita consumption of milk in the United States. As the editor explained: "Whether or not there is any connection between the two, milk consumption in the United States has increased as the eradication of bovine tuberculosis has progressed. . . ."⁶¹ The idea that editors had been hammering on for at least twenty-five years had taken hold. All that was needed was time and money to carry out the plan for complete eradication of bovine tuberculosis.

Meanwhile, pasteurization came into greater use. Not only tuberculosis eradication but more widespread pasteurization was credited with increasing milk consumption. In 1926 the Milk Reporter noted: "Coming along on the heels of pasteurization has come an era in which the consuming public has become better satisfied with the quality of its milk than has ever been known and with it has also come a large increase in the consumption of milk."⁶²

Pasteurization Is Opposed and Supported

The Jersey Bulletin, however, did not recognize any such benefits. Brown complained:

Universal pasteurization would penalize tens of thousands of producers of Jersey milk who have met all requirements of strictest sanitary laws, and have established a valuable and legitimate business in producing and selling natural milk, that is unquestioned as a perfect and pure food. They have done so because well informed people prefer natural milk rather than milk that has been sent through the heat of pasteurization, and has been stripped of the aroma and tastiness which only untreated milk possesses. They are in the business to meet the demand for this standard of milk, and if they resent enforced pasteurization it is for both a monetary reason and because they feel that enforced pasteurization casts a shadow over their own scrupulous care.

Unquestionably, there is a lot of milk that needs to be pasteurized. Likewise there is a lot that does not need

it. It is nonsensical and unjust to penalize the latter by a blanket order for pasteurization.⁶³

One month later Brown was answered, if indirectly, by the New York Produce Review which explained: "A milk pasteurization ordinance is essential to the welfare of every municipality whether large or small. It is only humane that the health of growing children should be protected in this manner. While this might work a hardship to many small retailers of milk and require readjustments in handling the milk supply of a considerable number of cities, it would be productive of material beneficial results. Not the least of these would be the elimination of many milk peddlers whose ideas of sanitation make them utterly unfit to handle any product that is consumed by the general public."⁶⁴ On the whole, the argument was unanswerable.

For the first time since 1880, the editors emphasized kinds and amounts of feeds more than the use of silos. There were, of course, some articles on silos, but the proportion had dwindled considerably. Instead, the editors concentrated on the dangers of feeding cattle chopped wire or nails, or the hazards of turning cattle on bitterweed pastures. The only unusual note concerned editorial opposition to efforts to have sweet clover outlawed as a noxious weed.⁶⁵ Hoard's Dairyman mentioned the need for high-vitamin feed to produce high-vitamin dairy products, but other editorial advice generally centered on the need for succulents or the advantages of feeding alfalfa.⁶⁶

Show Ring Abuses Are Criticized

By 1919 interest in breeds and breeding was restricted to the farm journals. The dairy farm journals carried articles entitled "The Guernsey in America," "Boarders Not Wanted in Dairying," and "Brown Swiss Progress." In 1929 the Dairy Farmer demanded an end to show ring abuses and incidentally exposed some of the activities of the breeding fraternity: "No one should begrudge any individual the right to purchase a good animal and to capitalize on that acquisition. Certainly anyone should be allowed to buy a cow and put her on the show circuit just as much as he should be privileged to milk her. But when it comes to the point where certain individuals put out vast sums of money year after year for such animals and with no hopes of ever getting it back, we are obliged to ask ourselves where we are headed."⁶⁷ By 1926 Hoard's Dairyman took up the question

of humaneness again with an appeal for gentle treatment of bulls.⁶⁸ Apparently kind treatment of cattle was more common than formerly, since editorial remarks on kindness had decreased appreciably over the past twenty years.

All farm editors continued to insist that the quality of dairy cattle be improved. Between 1919 and 1929, however, the dairy journals emphasized the need for purebred bulls. Before, attention had been dispersed on many aspects of breeding, and of course there had been the old dual-purpose, single-purpose battle. But the new emphasis was on improving herds by means of a bull rather than on demands for greater use of purebred herds. Meanwhile, dual-purpose advocates seemed to have disappeared.⁶⁹ The general attitude of the dairy editors toward breeding was best expressed by a writer in the Pacific Dairy Review. He approached the problem from the bull's standpoint.

They call me a scrub bull; yet I have a pedigree. I was sired by a scrub, dam'd by a scrub and am treated like a scrub, and I sometimes think that I am owned by a scrub. My tribe outnumbers purebred bulls four to one. Just why I should exist is a mystery even to me. Yet, I am not responsible for it. I was brought into the world without my consent and I shall probably leave it against my will. In the meantime I am getting the most vicious publicity, principally through the farm press. They say I am a renegade and an abomination, and should be exterminated. Dairy men passing my owner's farm look at me with contempt; even the cows show me no respect. My own daughters seem to hold a grudge against me, saying that I am responsible for their low production. I cannot argue the point for it is true. But what can I do? My owner must think a lot of me personally, or he would not continue to support me, knowing that I can never improve the quality of his herd or be a source of profit to him. These cow testing associations are certainly showing me up, and I can see the handwriting on the wall. My tribe is doomed. Under the keen competition and low prices of good purebred bulls there will soon be no place on the farm for me. So goodbye, I may be gone but not forgotten, for I have retarded the development of the dairy industry for many years.—J. E. D. ⁷⁰

In reply, some farmers objected that purebred bulls cost too much, and at least one asserted that there was no point to improving cattle anyway. The editor of the Dairy Farmer

reported: "The other day I found a new reason for not joining a cow testing association. A man told me he didn't want to make any more money for the political grafters and agricultural colleges get it all anyway. He was using a scrub bull; feeding timothy hay and nubbins; you could find nearly every color of Joseph's coat in his herd and he admitted he had never kept any records. If he keeps that up he is in a good way to get his wish, but what will become of the political grafters and agricultural colleges?"⁷¹ From time to time the editors emphasized the advantages of community breed associations as the best means of putting good bulls in the reach of all. Even the breed journals, which might have opposed the consequent reduced bull sales, championed the idea.⁷²

Breed Journals Cease Strife

By 1919 the old animosity between breed journals changed somewhat. Editors no longer blasted one another. Instead they loftily proclaimed the superiority of their particular breed without drawing specific and invidious comparisons.⁷³ The editors warned their readers to maintain the quality of their cattle and not fall into the error of too much pedigree and too little real cow. During the depression the editors insisted that the reason for high-grade prices and low pure-bred prices was that farmers were being forced into dairying but were content to start with grades. The papers also carried a wide variety of local, personal, and promotional news; and in 1919 Guénon's theory was definitely discredited, this time by Professor J. J. Hooper of Kentucky.⁷⁴

On the whole, the farm press of the twenties reported relatively few improvements in dairy farming. Editors urged that farmers keep records, save manure properly, and use milking machines. The most significant development, and that which the editors most emphasized, was the introduction of the gasoline generator and farm electricity. The dairy journals carried details on how electric appliances worked and suggested the use of vacuum cleaners, fans, and sewing machines.⁷⁵ The Dairy Farmer even went to the extent of warning farmers that they were on the road to ruin if they did not use electric power. E. M. Harmon wrote in 1927:

A few years ago a friend of mine who had prospered from his dairy herd, refused to yield to the requests of his wife and son for a farm electric plant. He said he

was not sure whether his boy would stay on the farm, and that he had best keep his savings for a time when he might need them. So they groped on, tolerating the old inconveniences and doing work by hand which could have been done more easily and cheaply with electric power.

Today tragedy is facing that farm and family. The son is gone into other fields, where he can do things more efficiently. Old age is coming on, and profits are on the decline. This man who was once the outstanding leader in the community, has given way to his more progressive neighbors. Only those of us who knew him then can appreciate what his refusal to spend a few hundred dollars has cost him in pride, in comfort and in profits.

Electricity on the dairy farm today is not a luxury. Our industry is entering into the most highly competitive period in its history. Success in the future depends upon intelligent, keen minded dairymen and on well equipped, well managed farms where there is no waste of time or materials. Electric power contributes to both in a material way and as such deserves an important place on every dairy farm. Have you ever known a dairyman to regret having installed electricity? Don't make the mistake of my friend.⁷⁶

The editors looked into the distance and saw all market milk cooled electrically on the farm. At the same time, they noted the use of the electric pump in irrigation, and praised electric refrigeration.⁷⁷

The dairy journals continued general advice on manufacturing processes, although most of the articles merely exhorted processors to be careful and clean. The editors again went over the problems of moldy butter, gassy cheese, filled cheese, skim cheese, and spoiled cream. As before, creamerymen were told to pay for cream according to quality, but repetition of the injunction indicated that it was largely ignored by dairymen.

Advocate Return to Home Manufacture of Cheese

In 1923 the Dairy Farmer carried a detailed article on how to make cheese at home. The directions were essentially the same as those employed in the 1830's and 1840's. There were some differences, however. Thermometers were suggested to test the temperature of the curd, as a substitute for inserting the right elbow. For a press, a lard

press was recommended, and rennet tablets were advocated in place of rennet strips cut from a calf stomach. This reversion to home manufacture almost amounted to an innovation and seemed to indicate that with low farm prices, farmers had to produce at home what they could not afford to buy.⁷⁸

The ice cream industry offered a few new developments, most of them transitory. The Ice Cream Trade Journal suggested the manufacture of goat's milk ice cream, flavored with rose leaves, after the Grecian and Cretan custom. The Pacific Dairy Review reported the use of dehydrated vegetables in ice cream. "The new product is produced in one flavor—a combination of vanilla ice cream, with lemon juice added and the further addition of dehydrated vegetables, either spinach, carrots, celery, lettuce or tomatoes."⁷⁹ The new salad did not, however, gain wide popularity.

Without doubt the depression dominated editorial thinking during the twenties. As in past depressions, the dairy journals advised hard work and coöperation as a solution to economic trouble. In the twenties, however, the papers added the new ingredients of cheerfulness and enthusiasm, which, when blended with orthodox economic theory were to solve the problems of the depression. In spite of a devotion to free enterprise, the editors condoned government assistance, provided that it directly helped their own particular branch of the industry. Moreover, editors opposed low tariffs on dairy products and generally disliked the subsidy provisions of various farm relief measures. They were certain that all would end well if only the market mechanism was not disturbed.

On social questions the editors suddenly discovered that women might be reading dairy journals. The papers also developed some opinions on prohibition. Generally the farm journals supported, or were silent about, the experiment. In contrast, the trade journals tended to look on it with misgivings. In labor questions, farm editors remained quiet when farmers sought to enlist the aid of organized labor during milk strikes. On the other hand, trade editors encouraged butter and cheesemakers to organize and demand higher wages from farmers. Labor organization was a tool which none of the editors liked particularly but which most of them were willing to use.

In veterinary medicine great progress was made in tuberculosis eradication. The dairy press was consistently in the

vanguard demanding faster action. In technology, the greatest innovation was the program for widespread use of electricity on dairy farms.

Meanwhile several old editorial campaigns died out. The railroads were seldom attacked, primarily because they were no longer the only source of cheap transportation. The editors no longer stressed the use of silos. The dual-purpose idea in cattle breeding disappeared from the press, and kindness to animals hardly rated a mention. On the whole, the old problems were solved or nearly so. After 1929 the industry was caught in the greatest depression in American history. All editorial programs and ideas centered around the economic and political upheavals, while the older problems drifted to the edge of journalistic interest. Thus ended the twenties.

Chapter 12 - The Great Depression and After 1930-1941

Depression Dominates Editorial Thinking

Despite the most severe and prolonged depression in American history, only one of the old papers ceased publication between 1930 and 1941. Two others changed title and frequency of publication, but on the whole, the established journals managed to survive the depression.¹ During the same period, ten periodicals began publication. In the order of their appearance, these were: Dairy Papers Associated, of Carthage, Missouri; the Milk Inspector, of Ventura, California; Vitamin D Milk, of New York; the Florida Cattleman and Livestock Journal, of Kissimmee; Certified Milk, of New York; the Union Farmer, of Ogdensburg, N.Y.; the Eastern Milk Producer, of Cobleskill, N.Y.; the Dairy Farmer's Digest, of Metuchen, N.J.; the American Dairy Goat News, of Richmond, Virginia; and the Modern Dairyman, of St. Paul, Minnesota.²

The depression dominated editorial thinking. Government attempts to halt the depression entered the discussion of every subject from the use of paper milk containers to the social status of women. Meanwhile, the cheerful philosophy of the twenties still appeared as editors sought to smile through adversity. The editor of the Butter and Cheese Journal remarked in 1930: "No one interested in the butter industry should lose heart. It is one of the soundest industries in the country. Butter men have had it pretty easy for a number of years and it is to be expected that rough seas should be encountered. Thorns usually grow where roses grow."³ Similar sentiments were echoed by other journals. After 1936, when business conditions improved, the journalists united in apprehensively watching government activity. In December, 1936, Dairy Produce spoke for all journals when it speculated on possible government activity:

Generally favorable profit reports for operations in 1936 were expected.

The greatest source of uncertainty and apprehension lies in the field of legislation and general government policy. National experiments in controlled economics have become major business factors and that they have a profound influence upon the dairy industry is generally recognized.

In addition to the various social security measures which will cover a steadily widening field during the coming year, the dairy industry must contemplate the outcome of a continued soil conservation program, consumer co-operative movements, various commodity stabilizations, money and interest control by the federal government, reciprocal tariff bargaining, legislation relative to oleomargarine and other products competing with dairy products.⁴

Men tend to fear the unknown, and the list of possible government activities was enough to frighten any editor, especially when fear of depression was largely gone.

The editors said very little directly about economic theory. They observed that the cause of the agricultural depression was lower consumer income and that drastic government action was necessary as an emergency measure.⁵ Such action, however, was to be only temporary. In 1932 Dairy Produce reported that at least one businessman favored treating milk distribution as a public utility. This executive remarked: "... what good is a business unless you can make a profit out of it." In 1937, however, the American Produce Review opposed this public utility idea on antimonopoly grounds:

Among the many studies that have been made in recent years of the dairy processing or distributing business we find the conclusion frequently expressed that considerable economies are possible through a reduction in the number of competing units in each department of the business. The opportunity of lessening cost by consolidation of service units is proclaimed as extending all the way from hauling milk or cream... to delivering the packaged units to the consumer.

.....
But many investigators fail to give sufficient weight to the dangers lurking in any policy of giving one agency a

monopoly on any local service.... We must reckon with human nature. Given a monopoly, the incentive to operate economically often largely disappears.⁶

Editors at first demanded government help and then as relative prosperity returned, angrily asserted that the government was impeding recovery. In 1932 Dairy Produce expressed the essence of the dilemma: "The country is looking for something concrete to base a reestablishment of confidence. Big business and the doctrines of 1929 appear inadequate to cope with the situation. The propagandists have the reaction of too many empty promises against them. A choice of a return to individualism or to risk the uncertainties of more collectivism is now before our people. In the meantime, they are staggering under a load of increased taxation."⁷

Give More Attention to Politics

In 1931 Dairy Record protested the growing concentration of political power at Washington. Gordon, of Dairy Record, admitted that federal action almost always arose from public demand for some service which the states could or would not provide. On the whole, editors devoted considerable space to political as well as economic questions. The two problems were inseparably bound, and consequently the editors could not remain aloof from political activities as they often had in the past.

Editors generally castigated politicians and government, regardless of party. In 1932 Dairy Produce observed that prohibition gave the politicians an opportunity to straddle the more significant questions, while a correspondent in Hoard's Dairyman gently chided politicians with brief comments on various revolutions under the title: "HISTORY TEACHES."⁸

In 1936 Hoard's Dairyman explained why its political policy was nonpartisan. The editor asserted that he wished to be free to criticize either party. His editorials were chiefly devoted to attacks on government. Other editors were interested in party politics. As early as 1936 Dairy Record complained about the similarity between Democratic and Republican farm programs:

In agriculture, as in other public questions, one hopeful thing about the forthcoming political campaign is that there is a definite cleavage between the principles of the

two parties, instead of a continuance of the past condition wherein there was little actual distinction between their platforms. The Democrats are irrevocably committed to a program of crop curtailment, while the Republicans will stand for a plan of surplus control without restriction of production. The farmers of the country will at least have an opportunity to make their choice for two divergent proposals.⁹

The editors also criticized the way in which tax money was spent. The farm editors, especially, thought that greater expenditures might be better used to assist agriculture. In 1930 Hoard's Dairyman insisted that more money be devoted to research and less to the Farm Board or government lending agencies. Nevertheless, editorial opinion was not unanimous. In 1931 Dairy Record defied all farm journals and asserted that farmers were hardly taxed in comparison with urbanites. The editor concluded that perhaps agriculture had less claim on the treasury than many editors believed.

At the same time, the Creamery Journal declared that government attempts to support farm prices were bound to fail. Between 1930 and 1941 this opinion was perhaps the one outstanding area of agreement among all dairy journals. Farm price support was held to be unworkable because it defied the laws of supply and demand.¹⁰ As the Creamery Journal explained in 1939: "Most, if not all, of the efforts directed at maintaining the prices of farm commodities have failed to meet with the success their sponsors claimed for the remedy. The chief fault to be found with price-pegging lies in the fact that it fails to create demand for the product.

.....
It has the further disadvantage of stimulating production and aggravating the very condition that was hoped in the beginning to remedy."¹¹ Meanwhile, dairy editors in general attacked the reciprocal trade agreements whenever opportunity presented. In particular, the press opposed free entry of Brazilian habassu oil, which could be used to manufacture oleomargarine.¹²

In short, although editorial reaction to the depression was not unified, certain patterns were apparent. Dairy journalists feared and opposed government expansion. That was the extent of their political theory. Their economic theory, implied if not expressed, centered on the idea that the market mechanism, especially supply and demand, should not be

tampered with. In spite of these ideas, the editors approved most of the early New Deal programs, partly because they had nothing better to offer. Between 1930 and 1932 editors sought to find the cause of the depression. They suggested poor marketing techniques, drought, and bank instability as causes, but by 1933 the editors recognized that the trouble was neither temporary nor simple. In 1931 the Creamery Journal had proclaimed that the agony was over. Five years were to pass before an editor dared a similar prediction.¹³

Editors Oppose Pump-Priming

Pump-priming schemes were the first governmental moves attacked by the dairy press. In one of these editorial outbursts the Jersey Bulletin revealed a low opinion of both businessmen and government: "Let it be hoped that at least some of the gigantic efforts to resuscitate Old Man Business with hypodermics of billions of dollars will bring the old chap around, but he will probably continue to fretfully pick at the covers until after the election in November. Maybe some of the billions will finally result in jobs for the hungry, almost desperate seekers of employment. Until jobs are available, all the money Uncle Sam could pile into banks, railroads, etc., will fail to do what the public has a right to hope from such generosity."¹⁴ Although editors opposed pump-priming, they approved emergency efforts to sell dairy products. As Dairy Produce remarked in 1933: "We would not need to have any worries about dairy surplus if butter and other dairy products entered generally into Emergency Relief programs."¹⁵ The dairy editors also condoned the bank moratorium, the National Recovery Act, and the Farm Relief Bill.¹⁶ But after 1934, editors changed their opinions of relief. In 1935 the National Butter and Cheese Journal caustically noted that: "Congress is with us again. The bills were prepared beforehand and will be sent in in quantity. The people are awaiting the results of the many threats in the way of drastic legislation and the promises of definite, helpful laws."¹⁷ Editorial reaction to the New Deal was, of course, by no means unified, and criticism of Congress was not equivalent to criticism of the New Deal. In 1936 Dairy Produce explained: "... it is interesting to note that the central tenet of the administration—higher prices for farm products—has substantially come about. In other words, the New Deal scarcity theory is seen as producing the desired price effect with increased farm income even in the fact [sic] of an inconsistent foreign trade policy.

Whether this situation on farm prices would exist without the tremendous government pump-priming expenditures is questionable."¹⁸ Late in the same year Dairy Produce hoped that returning prosperity would bring an end to pump-priming. By late 1937, however, the editors were confronted with a recession and the apparent necessity for continuing the New Deal programs. Not all of them were happy about this development, and by 1939 business had so recovered that at least one editor complained of continuing steps toward socialism. Mal Parks of the Ice Cream Trade Journal bitingly asked: "... what results have we had from the ever-increasing cost of these experiments? Is the growing amount of government red-tape and the burdensome yoke of this 'protection' worth what it is costing both in terms of money and the stifling of that spirit of free enterprise that has made this country great?"¹⁹ By 1941 Dairy Produce both defended free enterprise and demanded more government help. "Dairymen learned to their dismay this month that while the Farm Administration is seeking millions of pounds of dairy foods for lease-lend export, it also offered determined resistance to price advances. Despite the rising surge of consumer buying power, Washington has denied higher fluid prices in areas where control is by federal order. This month, by what had every appearance of a planned effort, the administration struck down the most favorable butter market in more than ten years."²⁰ If the federal government were to buy dairy products for lend-lease, obviously the government would not want to pay inflated prices. A price rise, plus government buying, would have amounted to subsidy of the dairy industry. This was what the editor demanded. He was dismayed to come upon economy in government. Times had changed since 1930.

After 1930 milk strikes and wars were fairly common. Milk strikes (that is, attempts to prevent delivery of milk to processors) like labor strikes, occasionally hinged on collective bargaining. In 1931 Dairy Record reported one of these incidents: "It is not a question of milk prices which constitutes the point in issue, but a recognition of the producers' organization by the big St. Louis dairy company. Most of the local distributors are buying from the Sanitary Milk Producers on the basic and surplus plan of price payment, but the Pevely Dairy Company, largest of the local milk concerns, has refused to deal with the bargaining association."²¹ In contrast to the attitude of the twenties, the farm journals did not ignore the milk strikes. In 1932

Hoard's Dairyman asserted that strikes were not wrong, but futile. As Glover observed: "This is about the situation. If all people had employment and were earning money, times would improve immediately and there would be a larger demand for farm products which would increase their prices. The period in which we are living is not to any one's taste but nothing will be accomplished by farm strikes, by holding meetings, or by passing resolutions demanding higher prices for farm products."²² The advice did not halt competitive conflicts between processors or between producers. In 1933 two rival coöperative organizations of milk producers fought for supremacy in the Rochester milk shed. In 1936 a similar conflict broke out between farm groups who wanted a monopoly in milk supplying in Indianapolis. Meanwhile, organized labor entered milk strikes. In 1939 the CIO helped New York farmers prevent the delivery of milk to distributors. Farmers and workers managed the strike, which the editor of American Milk Review insisted was successful primarily because of the CIO pickets.²³ As before, trade editors opposed all these disruptions of the orderly marketing of dairy products.

On the other hand, the dairy trade journals frequently pleaded for higher wages for cheese and butter makers, and even encouraged these workers to organize. In 1930 the Butter and Cheese Journal asserted the typical attitude: "Perhaps the cheese industry can't stand for higher wages for these hard working operators just at this time. With cheese selling at 75 per cent of the price of a year ago this may be an inopportune time to mention higher salaries to cheesemakers, but we believe that any general plans for promoting the cheese industry should include proper compensation for the good men who operate cheese factories. No industry that we know about has ever succeeded by paying starvation wages to its important employees."²⁴ In 1933 Dairy Produce reported an instance where poor wage scales had deprived one Ben Stern of managerial control of his business: "In Cleveland, Ohio, the Echo Dairy which was operated by Ben Stern is in a new predicament and a dire one. From reports and stories heard in Cleveland it would appear that the plant and business is now operated in truly socialistic fashion. A committee of workers looks after everything and Stern has little to say since he signed a contract demanded of him by the workers. It is said that very low wages paid by the company made it possible for agitators to gain followers among the employees."²⁵ The editors did

not approve of socialism, nor of labor unions, terms which they often considered synonymous. In 1932 Dairy Record lamented that the various creamery managers' associations were often mistaken for unions and that farmers consequently balked at paying association wages. Gordon, of the Dairy Record, suggested that prospective employees not mention their association. Again in 1936 editors pointed out that creameries could not expect to obtain good men by paying them low wages, and in 1941 the Creamery Journal once more urged creamery managers to forestall labor trouble by carefully revising wage scales. Both injunctions occurred during times of relative prosperity and merely indicated that wages had not kept pace with profits. As usual, members of the industry ignored editorial advice. Labor troubles plagued the industry between 1937 and 1939. The journals invariably protested the use of violence in settling these disputes. In 1937, wage and hour laws disturbed editors who hoped that individualism was not so dead that men would work only stipulated amounts of time for specified amounts of pay. In 1939 the editors were relieved to find that dairy workers were exempt from the hour provisions of the law.²⁶

Editors Oppose Lewis' Attempts to Organize Farmers

And then, early in 1942 John L. Lewis began to organize the dairy farmers. Dairy Produce reported in February of that year:

New trouble for the dairy industry was seen as shaping up as the CIO late in February opened a campaign to organize dairymen of the Chicago milk-shed in Wisconsin, Illinois and Minnesota as part of a national program.

.....

The Union's general organization committee voted Feb. 7 to affiliate with John L. Lewis' United Mine Workers through District 50. By-products section of the UMW. The union claims membership of 22,000 milk producers in three states.

"We intend to organize all the 3,000,000 dairymen in the United States," Marlatt said.²⁷

The editors opposed such activity. Although they disliked jurisdictional strikes, they hopefully relied on the coöperatives to fight the new union and drive it out of existence.²⁸

Concurrently, the editors dealt with natural dangers as well as market and labor hazards. The years between 1930 and 1940 were years of drought, slightly alleviated by

periods of adequate rainfall. The dairy press indicated that 1930, 1932, 1934, and 1936 were the worst years for the industry.²⁹ In 1930 the Holstein-Friesian World explained:

The agricultural situation is much on the front pages of newspapers these days, and it seems evident that already the widespread drought and heat of the past month or more has assumed the aspect of a national calamity. Naturally some sections are much harder hit than others, and it seems impossible to forecast the eventual outcome. Certain it is that much suffering and hardship will result in areas most seriously affected. It seems equally certain, although it will not be of much help to those farmers whose crops have been ruined, that all grain crops affected and feeds for live stock will be higher. Dairy products, due to the greatly lessened production, should also regain much of the ground lost since last fall. The Dairyman's League has already announced an increase of thirty-seven cents a hundred pounds for fluid milk, effective August 11.

This situation is somewhat complicated by the lack of buying power of many city consumers as a result of the general industrial depression. Higher food prices will bring that much added hardship this winter, but it is a situation that must be faced. The producers will still be carrying their share of the load.

Reports seem to indicate that many dairy cattle in the worse affected areas are being sold for slaughter on account of lack of feed and water.

Perhaps this is the way of Providence in reducing surpluses in many lines of agricultural production, but it is bitter medicine for those... forced to bear the brunt of it.³⁰

Editorial reactions in subsequent droughts were less extensive but described approximately the same conditions and ended with the same resignation to the will of God.

Fight against Oleomargarine Becomes Intense

And, in the thirties, the editorial fight against oleomargarine reached a new intensity. In part this renewed battle stemmed from the very antiquity of the oleomargarine tax which had been passed in 1902, and which, in a period of economic distress was attacked as archaic. As A. M. Loomis wrote in the American Creamery and Poultry Produce Review in 1930: "There must be a new campaign of education

to inform a new generation."³¹ Certainly the dairy editors felt impelled to do something after it was discovered that in 1930 farmer purchases of oleomargarine outnumbered butter purchases three to one. In 1933 Hoard's Dairyman made essentially the same discovery and asked plaintively: "... isn't it setting a bad example when a farmer sells his own products and buys substitutes?"³²

In the competitive struggle between oleomargarine manufacturers and the dairy industry, the legal advantage usually went to dairying and the economic to oleomargarine. On the dairy industry side, in 1930 a federal tax was placed on colored cooking fats. In 1932 the editors demanded that the Philippines be given independence so that cocoanut oil could be excluded with a tariff. The editors also sought to demonstrate that oleomargarine injured the market for cottonseed oil, and in 1937 they joyfully reported that an excise tax on Philippine oils had been approved by the Supreme Court. In 1936 some dairy enthusiasts proposed that all oleomargarine be taxed an additional five cents a pound. Glover of Hoard's Dairyman vehemently opposed the proposed tax on the ground that it would not halt oleomargarine sales and that, in any case, those sales were proportionately lower in 1934 than in 1920. He predicted that as lard decreased in price, oleomargarine sales would fall.³³

On the oleomargarine side there were a few minor victories. In 1931 the United States Bureau of Internal Revenue ruled "... that oleomargarine colored through the infusion of palm oil is not artificially colored and therefore does not have to pay the federal tax of 10 cents a pound." The victory was short lived, but it enraged the editors for a time.

In 1931, W. A. Gordon, of Dairy Record, denounced the American Medical Association because it issued a stamp of approval to Jelke's Good Luck oleomargarine. He advised creamerymen not to add prestige to the stamp of the AMA by having butter approved. In 1937 Gordon re-entered the fight to urge action against oleomargarine advertisements reading: "Kill This Tax."³⁴ He advised counter propaganda.

In 1935, E. K. Slater of the National Butter and Cheese Journal explained other tactics of the oleomargarine manufacturers. He also suggested industry action, and observed: "Oleo manufacturers and their misguided supporters are smart. They plan to take advantage of consumer hysteria and political unrest to secure the enactment of entirely new legislation, if possible. They apparently feel that congress is so accustomed to passing radically new laws that its

members will favor oleo legislation that would have been impossible of passage a few years back.”³⁵ The effective blows came after 1939. In that year the Bureau of Prisons threatened to serve only oleomargarine to prisoners. In 1940 Mississippi reduced the tax for oleomargarine dealers if the product contained a cottonseed oil base, and in 1941 the U.S. Department of Agriculture permitted manufacturers to include synthetic vitamin A in oleomargarine. The Federal Security Administrator, Paul V. McNutt, enraged Paton of Dairy Produce by even allowing oleomargarine to be butter flavored. There the matter stood in 1941. Never before had the dairy industry lost so many battles. These were just skirmishes, but they indicated what the future might hold.³⁶

Market reports continued to occupy space in dairy journals, while speculation on future market conditions reached new heights. The editors looked expectantly into the future and hoped for better dairy product consumption. They invariably found that consumers wanted to buy butter but thought they could not afford to.³⁷ After 1939 the European war raised editorial hopes, both because of reduced European dairy production and because the war helped solve the industrial depression. As in 1914 the dairy papers noted that Europe's distress was America's opportunity, although, as in the First World War, this particular form of altruism became more pronounced after America entered the war.³⁸

Meanwhile, editors toyed with various ideas for increasing prosperity by introducing new products or techniques. Hoard's Dairyman thought that goat's cream could not find a ready market, but the Pacific Dairy Review believed that California distributors might increase sales if they peddled orange juice along with their milk. In 1932 American Creamery noted the development of Birdseye frozen foods but did not relate the innovation to the dairy industry. And in 1938 the Ice Cream Trade Journal decided that it was both proper and profitable for manufacturers to operate retail outlets. These innovations, however, did not occupy much space in the dairy journals. Instead, the editors concentrated on advertising and promotion.³⁹

Plead for More and Better Salesmanship

Early in 1930 the Butter and Cheese Journal observed that “the dairy industry has connected with it, undoubtedly the poorest salesmen in the world, as can be proved from many standpoints.” Between 1930 and 1941 this was the tenor of

much editorial criticism of the industry. Dairy journals carried articles entitled "TIMELY ADVERTISING NOW" or "National Trademark News." American Creamery advised local radio advertising, while Dairy Produce praised Wisconsin cheese advertisements in national women's magazines. By 1939 selling became the chief preoccupation of the Ice Cream Trade Journal which, of course, advocated greater advertising.⁴⁰ At the same time, Pacific Dairy Review noted: "It would appear that the dairy industry is beginning to appreciate the fact that in order to get its share of the consumer's food dollar, it will have to advertise. By that we do not mean brand advertising but industry advertising—tell the consumer the value of our products. The greatest competition of a dairyman, whether he is selling milk, butter, ice cream or cheese, is not from like firms—but from other foods."⁴¹ The editors also pointed out new outlets when they appeared. In 1930 the Butter and Cheese Journal noted: "In some creamery towns no one can buy the local creamery's products except the patrons. Others must buy butter shipped in from the outside, or resort to oleo. The manager of the local creamery works on the theory that it is too much trouble to supply the local demand. All the butter is shipped out."⁴² Slater strongly urged creamery-men to sell in their own vicinity.

Perhaps the local creameries were reluctant to deal with local retailers. The Ice Cream Trade Journal, for example, complained of retailers who oppressed ice cream peddlers. The editor insisted that the retailers did nothing to increase ice cream sales and that they lost no business to vendors. This antiretailer attitude appeared frequently in this journal. In 1933 the editor advised that retailers who put cheap ice cream in the cabinets of a reputable manufacturer should be dropped as outlets.⁴³ In 1932 another retailer trick was denounced by the Pacific Dairy Review. "Phil Battelle, executive secretary of the Southern California Milk Dealers' Association, advises us that the Los Angeles City Council recently passed the 'Loss Leader' ordinance. In this respect they followed the lead of the San Bernardino council. The ordinance will help greatly in the effort to prevent the sale of dairy products at ruinous prices to attract customers to stores."⁴⁴ These and similar complaints indicated that industry-retail relations were sometimes unpleasant. To correct this situation, the editors advised more promotion and more helpful legislation so that dairy products could supplant other food products.

Editorial comments on transportation ranged from an account of a parcel post delivery of hay to a prediction that after the war, air shipment of milk would become commonplace.⁴⁵ The main concern of the editors, however, was automotive transportation. They occasionally ran articles denouncing restrictive taxes on truck transportation and sometimes pointed out the advantage of using horses during a depression. As before, Dairy Record objected to the practice of collecting milk on truck routes, but nevertheless suggested that legislation to end the practice was "useless activity." The use of the tank truck for delivering whole milk was encouraged by the Pacific Dairy Review, which drew attention to a U.S. Department of Agriculture bulletin on the subject.⁴⁶

Heavy Mortality of Dairy-Farm Journals

By 1930 Hoard's Dairyman, the Northwest Dairyman and Farmer, the breed journals, and the farm-coöperative papers were the only significant dairy-farm periodicals still in existence. These farm editors continued the old campaigns for clean dairy utensils, proper use of manure, balanced rations, and cow testing. In feeding, new emphasis was placed on proteins and vitamin E, and some attention given to the advantages of ground over unground grain. The Jersey Bulletin devoted some space to electric fences, warning that they should be erected by an expert, but that otherwise they were superior to barbed wire. Editors also ranged over such topics as exercise for dairy cattle, feeding apples, farm wiring, and the shortage of farm help.⁴⁷ Writing on the labor shortage in 1937, Glover suggested:

There is a scarcity of competent farm help, this condition being especially true in industrial sections. Even during the depression there was not a surplus of capable farm help. The scarcity of labor for farms is causing many to wonder what they should do. It has been suggested that it would be well, in many instances, to change from grain to growing grass and legumes. It requires less labor to grow grass and legumes than it does to grow corn, wheat, oats or barley. Another way would be to use more labor saving machinery. The amount of machinery which can be used economically depends upon many factors, but the size of the farm is one of the most important things to consider.

This brings to mind the suggestion that neighbors co-

operate in owning machinery. If farms are situated so this can be done, it is one way to have a large investment in machinery without each one spending a lot of money.⁴⁸

Except for a new emphasis on grassland farming, editors advocated few improved farming techniques.

Breed Journals Pool Advertising

There were, however, some unusual developments in breeding. The depression hit breeders as hard as any other group, and although the breed editors continuously predicted better times, conditions did not improve greatly until 1940 or later.⁴⁹ Breed editors even pooled their advertising, for as Ayer's Directory of Newspapers and Periodicals announced under the Jersey Bulletin in 1937: "Space sold in combination with Holstein-Friesian World, Lacona, N.Y.; Guernsey Breeders' Journal, Peterboro, N.H.; Ayrshire Digest, Brandon, Vt."⁵⁰ That editors of breed journals developed a strong sense of solidarity may also be exhibited by an editorial which appeared in several journals and which incidentally exposed some breeder tricks. In 1930 the Holstein-Friesian World praised the Brown Swiss Breeders' Association for condemning the practice of having neighbors bid on animals at cattle auctions. The executive committee of the Brown Swiss Breeders' had discovered that in one sale men who were not known to be breeders had been present merely "to participate in the sale and bid up a large number of animals."⁵¹

In 1930 the editor of the Holstein-Friesian World was pleased to note that Holsteins were invading Texas, which had previously been a Jersey state. But by 1940 the spirit of fellowship had reached such pitch that editors praised the formation of a Pure Bred Cattle Association. As the Jersey Bulletin explained: "Competition is the spice of life, and when competitors get together in common cause, the spice is the rarest, and the most beneficial." The aims of the Association were: "To work together to 'find ways in which pure bred dairy cattle can fit further into the modern dairy program and be of benefit to dairy farmers.'" ⁵²

Editors insisted that breeders and farmers cull their herds and butcher unprofitable cattle. The advice continued to occupy a great deal of space. The most significant development in breeding was the discovery and attempted application of the laws of Mendel. The first articles on the subject appeared in the Guernsey Breeders' Journal in 1932.

In 1940 these articles were followed by the most complete exposition of the subject printed in a dairy journal when Hoard's Dairyman carried a series explaining Mendel's laws of heredity.⁵³ At length, genetics had been brought to the farmer.

Even as in the earliest days of dairy journalism, veterinary medicine attracted editorial attention. Bleeding as a remedy had previously fallen into disuse, and in 1932 Hoard's Dairyman suggested the end of another old veterinary practice: "It should also be understood that it is no longer considered good practice to give a cow a heroic dose of salts whenever she gets out of sorts, loses appetite, or is a bit constipated, bloated, or otherwise ailing."⁵⁴ And in 1940 the Jersey Bulletin drew attention to the use of sulfanilamide in the treatment of mastitis.⁵⁵

As late as 1931 the Creamery Journal expressed concern about farmer resistance to tuberculosis testing and eradication. But on the whole, eradication went forward rapidly. Most editorial comment concerned new laws and progress made in eliminating the disease, with articles entitled: "Texas Joins Rank of TB Free States" or "CONNECTICUT 39TH STATE TO BECOME FREE OF TB."⁵⁶ In 1937 Hoard's Dairyman proudly announced: "Nearly twenty years ago the federal government, in cooperation with various states, formulated the area plan for tuberculosis eradication. The results of this work are beyond expectation. It was pioneer work. No nation ever attempted a job of such great magnitude and importance. In only a short time now, perhaps this year, the United States will be declared bovine tuberculosis free area, meaning that its herds of cattle contain less than one-half of one per cent reacting animals."⁵⁷ Glover was a bit sanguine, for it was not until 1940 that Hoard's Dairyman reported that all states were accredited for tuberculosis; that is, they had less than 1 per cent infected cattle. Nevertheless, the achievement was indeed remarkable. Only forty-eight years after Koch had discovered the tuberculin test, bovine tuberculosis had been practically eliminated.

Editors Crusade against Other Diseases

Meanwhile the battle against contagious abortion assumed new prominence. In 1932 the Jersey Bulletin admitted a great divergence of opinion between authorities on the cause and cure of the disease, but by 1937 contagious abortion was known as Bang's disease and tests had been devised to discover infection in apparently healthy cattle. In the same

issue which reported the approaching end of the tuberculosis campaign, Glover of Hoard's Dairyman opened his intensive crusade against Bang's disease. In 1937 he told farmers not to attempt vaccination and warned that the agglutination test was too complicated for farmers to perform. Other periodicals carried essentially the same information.⁵⁸ Even as late as 1940 no effective cure had been found for the disease. As the Jersey Bulletin reported: "You may be among those who have bought 'remedies' for Bang's abortion.... Analysis of one of the products revealed only brown sugar, wood creosote and ash. Antiseptic dyes, carbolic and hydrochloric acids, forms of iodine and sulfanilimide were all found to be ineffective...."⁵⁹ In 1940 Hoard's Dairyman carried editorials which bore a remarkable resemblance to those run in the same paper forty years before. Only the subject matter had changed from tuberculosis to abortion. The editor explained:

The method used to eradicate Bang's disease is the same as was followed in the eradication of bovine tuberculosis. It is generally agreed that Bang's disease should be eliminated from our livestock but there is no general agreement on the method or methods to use in doing this. In the states where a considerable portion of the cattle are under government supervision, the slaughter method has been followed. This has raised considerable objection in the more thickly populated livestock areas because there is such a high percentage of Bang's disease that the expense of this method has been heavy. In sections where there is less livestock, the disease is not so widely spread and taking out a few reactors and following the system of disinfecting the barns and yards has proved very satisfactory. In these sections owners largely favor the slaughter method of eradicating Bang's disease. Owners of herds that have taken years to develop object to this method and believe calfhood vaccination is the better way.⁶⁰

The editors went to work on Bang's disease as they had on tuberculosis. There were to be popular questioning, angry letters from farmers, disagreement between scientists, discovery, denial, and reassertion of the relation of abortion to undulant fever, followed by urban demand for elimination of the disease. It was to be difficult work, as the battle against tuberculosis had shown.

Rely on Professors for News on Science

During the depression the manufacture of dairy products was in about the same position as dairy farming. There were few new developments and only cursory interest in the old campaigns. The editors told the cheese makers that new cheese factories would force the older dairy regions to improve cheese quality, that the creamerymen would have to buy cream according to quality, that pasteurization was now a necessity, and that centralizers were beginning to demand quality improvement in their products. Except that centralizers were no longer subject to editorial attack, injunctions remained unchanged from previous years.⁶¹ In 1935 the National Butter and Cheese Journal offered some specific advice on cheesemaking, but as in other journals, these departments were now conducted by professors who reported their own and other scientific investigation.

Meanwhile, the dairy journals continued to insist on high quality for dairy products. In 1936 Dairy Record applauded state laws which demanded high quality cream. The sequence of events followed the same pattern as other examples of government intervention in the dairy industry. First the editors had requested the farmers to be careful, then they had asked the buyers to discriminate against poor cream, but progress was evident only after legislation was put into effect.⁶² In 1936 Gordon of Dairy Record observed:

It may be a tough break for the producers who are faced with the extremely difficult problem involved, but the action of the various state authorities in providing a special grade for weedy cream is the only fair thing that can be done under the circumstances. Neither the buyers, nor the creamery operators can, with any justification, be asked to assume the loss which the presence of stinkweed and peppergrass entails, since the cream infected with those flavors is the product of the farmer.

As a matter of fact, a heavy penalty on weedy cream is about the only way that many farmers can be prevailed upon to make an effort to remedy this situation. Eradication of these pests will not be easy to bring about, but it is certain that little or nothing would be done on a widespread scale if a penalty for their presence in a farmer's pastures were not exacted.⁶³

In dairy technology, cold storage lockers received some

editorial attention. In 1938, the Ice Cream Trade Journal noted:

It isn't often, especially during "depression" times, that a new idea, involving expansion of present equipment or the construction of new plant units, meets with such widespread interest and acceptance, involving as it does the expenditure of new and reluctant capital. But a battery of Cold Storage Lockers with suitable facilities as an adjunct to present cold storage or refrigeration equipment, and the Cold Storage Locker Plant as a separate and distinct business enterprise, serve a useful and advantageous "all-time" purpose for countless people in modest circumstances, and therein, basically, lies the reason for the phenomenal growth of a brand new and economically sound idea.⁶⁴

Editors Report Advent of Paper Milk Containers

Some time around 1936, paper milk containers came into use. Various milk distributors immediately attempted to have them outlawed, brought suits based on unfair competition, and took other action to end the use of paper bottles. The dairy press merely reported these incidents.⁶⁵ By 1939 the innovation had spread. The American Milk Review reported that: "Considerable stir was created in milk circles here and elsewhere on November 8th by the announcement of Borden's Farm Products Division and the Sheffield Farms Co., Inc., that two-quart paper containers were to be introduced as a new addition to their home delivery service. Claimed definite advantages for consumers, for drivers, for producers, and for dealers were strongly featured in the introductory publicity."⁶⁶ Other journals reported favorably on the innovation in spite of protests made by various milk distributors. In December, 1939, the American Produce Review warned distributors to be careful in denouncing the innovation lest it appear that they were not interested in lower milk prices. The editor remarked, in a conciliatory fashion:

Whatever the eventual outcome with respect to this particular package, it appears certain that the current step may well mark the opening of a new era in the field of milk distribution by developing, through the normal forces of competition, sound and vitally-important economies in the complex task of placing the product of the

dairy in the user's refrigerator. One thought in particular should be borne in mind: While these competitive forces are at work, every element involved must exercise the utmost care to shun any move which might induce, directly or indirectly, an impression or reaction in public sentiment unfavorable to the dairy business as a whole.

The REVIEW will be at pains to acquaint its readers with periodic surveys of this highly interesting development which now claims such a marked degree of attention throughout the industry.⁶⁷

Within a month the paper bottle had been introduced in Chicago and quickly spread across the country.⁶⁸ The dairy press, on the whole, did not discourage the change.

Meanwhile dairy journals reported considerable activity in dairy science. Some of the discoveries contradicted long held opinions on various phases of the production and processing dairy products. For example, in 1931 the Pacific Dairy Review noted that "milk cows become discouraged under excessive heat, but cold even down to zero does not materially affect the milk flow." This discovery made farm practice of the 1820's seem less backward than had been thought. Editors also observed that milk could be sterilized by supersound waves, that with modern refrigeration starters could be safely used in making butter, and that electric eyes might be used to grade milk. In bacteriology the editors reported the discovery of various microorganisms which caused damage to butter or cheese. The editors continued to demand cleanliness of processors and distributors, or as the Ice Cream Trade Journal put it in 1938: "CLEAN UP OR CLOSE UP. Syphilis, soda fountains—and ice cream!"⁶⁹

As before, the editors were greatly impressed with scientific discoveries but often found them rather difficult to discuss. In 1940 the Jersey Bulletin observed:

Those hormones, genes and other little wiggletails and bubbles that mean so much in the functioning of dairy cattle, are as baffling and intriguing as the atom buster. The best scientific minds have been chasing them for years and still all their secrets have not been revealed. But the search proves that the proper feeding and handling of cattle, and marketing their products, are only a part of this business of dairying. When the scientists

further unfold the mysteries inside, the layman will understand better what it is with which he has to work. In a way, handling of the feed fork and scoop and pulling teats are only minor details.⁷⁰

This faith in science indicated that problems of feeding and marketing no longer entirely dominated the editorial mind. Dairying had come a long way even since 1930.

The dairy journals also carried a fair amount of miscellaneous information. Much of it was human interest, and some of it appeared to be merely interesting filler. In 1931, for example, the Pacific Dairy Review reported:

It was a big day recently for the dairy industry, for the news dispatches contained in that one day two highly important items:

One dispatch stated that it was the birthday of John D. Rockefeller and that, in celebration thereof, the famed capitalist was allowed to have an extra glass of milk.

Another dispatch, a cable from Japan, stated that a certain young Japanese milk man had been adjudged the most prepossessing example of male beauty in Nippon and that he therefore was quitting his job to become a movie star.⁷¹

In 1940 the Jersey Bulletin noted the birth of Beula Borden to Elsie the Borden cow.⁷² Local news items were also fairly common and ranged from reports of a man suffering from hiccough attacks to announcements that O. W. Olson was leaving the dairy business to sell insurance.⁷³

The editors also treated social problems. In 1931 there was an outbreak of butter thefts, and the Creamery Journal carried several items on creamery burglaries. At the same time, items of and for women continued to appear in the various journals, most of them in farm papers. In 1930 Hoard's Dairyman noted that "several South Dakota farm women, who have recently had complete water systems installed in their homes have decided that 'it is cheaper to let the water do the running.'" The Northwest Dairyman and Farmer suggested that women keep the house clean rather than make it clean, and in 1940 Hoard's Dairyman felt called upon to praise modern women. As the editor wrote:

A member of the Maine Board of Agriculture, speaking in 1865 on the proposed agricultural college said:

"A suggestion had been made to us indirectly by an eminent man and successful teacher, that we should open the agricultural college to females as well as males; teaching them the best methods of making butter and cheese, the cultivation of flowers, the training and pruning of grape vines, and horticulture generally, also allowing them to listen to a large part of the lectures. But we believe that such a vision of beauty and splendor belongs rather to the future than the present."

Statements like this remind us of what was considered the place of woman less than a hundred years ago. She was supposed to be a housekeeper, raise a family, and was not to have the educational privileges for work outside the home that belonged to men. Perhaps much of the unrest today is due to this change of occupation and the attitude of everyone as to the place women should fill in the world. Only within recent years has it been considered appropriate for them to work in offices or to have the same educational opportunities as men. There may be discontent due to this change of vocation of woman, but we cannot help feel that she is better off and that our country is better for having given her the same opportunities and the same privileges as those enjoyed by men.⁷⁴

Editors Condemn Unethical Show Practices

Youth also attracted some editorial attention. In 1932 Hoard's Dairyman reported: "According to authentic report, one county agent last fall selected a calf out of a prominent purebred herd that a 4-H club boy might show it at a fair. Anyone who has ever given a moment's thought to what is considered an honest practice, would not for one moment have permitted himself to help a boy become a falsifier and a cheat. The calf was shown by the club member who neither owned it, raised it, fed it, nor trained it. The shocking thing about this practice is that other club leaders knew how this calf was selected and remained silent."⁷⁵ The editor then attacked men who would teach children dishonesty and cheating. He threatened to publish names the next time a similar incident occurred. Other editors contented themselves with praise of the 4-H Club, or else ignored youth activities.⁷⁶

Writes History of Pacific Coast Dairying

While the several journals indicated interest in history

from time to time, outstanding contributions in this field were made by Robert E. Jones, editor of the Pacific Dairy Review. In 1939 and 1940 he wrote a series of four scholarly articles on the history of Pacific Coast dairying and in 1940 carried an article on the history of Swiss cheese which attracted considerable interest. In the same year he published a history of the ice cream industry and also carried a short review of a history of the use of chocolate in dairy products. The interest of the editor was perhaps unusual, but the favorable reader response was even more remarkable.⁷⁷

The journals as a whole carried a fair proportion of philosophy and psychology, plus items of inspiration. In a period of back-to-the-land movements, C. J. Galpin sought to discover why former farmers came back to the farm. In 1930 he reported in Hoard's Dairyman that those who returned wanted the higher standard of living available in the country. The results of the inquiry did not at all dismay the editors, who continued to insist that farmers were economically worse off than their brethren in the cities.⁷⁸ At the same time, editors asserted that the farm was the best place to live.

And there were some inquiries into the source of urban-rural conflicts. In 1931 the Pacific Dairy Review offered an explanation of its own.

The fault lies with the inability of human intelligence to adjust itself to rapid economic change.

So, therefore, the problems in the dairy industry which are most acute with us are social problems. Lack of confidence in one another, the old and worn desire to take short cuts, to get an edge, the false theory that the tricky method may serve us best—this is the trouble, the core of it.

Let us, therefore, during 1931 devote ourselves to the problem of learning to get along better together.⁷⁹

In 1936 the Jersey Bulletin also championed the idea of getting along. As the editor remarked of the Spanish Civil War then raging: "We are right glad that we live in America instead of Spain. We have a brother who leans to Shorthorns, but we will never get out the shotguns to settle the dispute."⁸⁰ This seemed to express the essence of editorial social ideas.

Between 1930 and 1941 three world's fairs took place, at Chicago in 1932 and at New York and San Francisco in 1940.

As in 1893, Chicago undertook an exposition during the depth of a depression. The dairy editors took only passing interest in the fairs and generally only reprinted press-agent releases. Ruth McInerney wrote a fair sample of this sort of article for Hoard's Dairyman in 1933:

It's a show, that's true. But it's the kind of show that resembles the kind of toys they make for youngsters nowadays—educational.

.....
The few acres of "made-land" on which the dairy spectacle stands intends to present a bird's-eye view of this phase of agriculture during the past 100 years. And like the thirteenth bun in the baker's dozen, it aims to throw in a few pictures of what the dairyman can come to expect of the coming hundred years. It will be a case of holding on to your seats because Chicago has set out to upset all kinds of rules, laws, regulations, and accepted facts.⁸¹

Other papers mentioned the Chicago Fair casually. In 1939 the Pacific Dairy Review inaugurated a special column for news of the San Francisco fair. The editor called it a "semi-Surplus" column, which was an adequate description, since the column contained left-over odds and ends of no great importance. The column was shortly discontinued. Other papers handled the New York World's fair, but most of the material seemed to be taken from press-agent releases.⁸²

As in the depression of 1893 to 1898, technical advances in the dairy industry seemed to slow down between 1930 and 1941. Except for greater use of cold storage lockers and the introduction of paper milk bottles, there were no significant technical innovations during the depression. Meanwhile, the editors seemed to lose their fire and sense of mission. Changes or improvements in the industry were noted, sometimes commended, but seldom vigorously advocated. Even the campaign against abortion began more slowly than had the old fight against tuberculosis. On the other hand, the editors wrote vigorously on matters political or economic. They wanted government help, but did not want government intervention, and they were stuck on the dilemma of where one ceased and the other began. Generally, help was considered to be intervention as soon as the help was believed to be unnecessary. Driving the government out of business, therefore, became the chief obsession of editors after 1942.

Chapter 13 - Dairy Journals and a Planned Economy 1942-1950

Influence of Dairy Journals Increases

Of the old dairy papers, none failed during the depression, but two ceased publication between 1942 and 1950. In 1942 Dairy Produce died, and in 1950 the Creamery Journal was absorbed by Dairy Record.¹ Of the old established papers, only ten remained. Altogether, out of the large number started over the years but forty-seven journals were being published in 1950.²

However, circulation of the dairy journals still published steadily increased during these eight years from 1942 to 1950. Presumably the influence of the papers became greater as their circulation grew. Three papers from the various categories of dairy journals may serve as typical. Dairy Record (trade) increased from 3,422 in 1943 to 4,145 in 1949; the Jersey Bulletin (breed) from 7,567 in 1943 to 12,393 in 1949; and Hoard's Dairyman (farm) from 241,264 to 311,865 in the same years.

The Second World War had brought both prosperity and greater government control to the dairy industry; consequently the war influenced editorial policy from 1942 to 1945. Postwar planning, which began as soon as the war started, occupied considerable space in the journals. However, after 1945 the editors concentrated on an effort to shake off what they considered to be the oppressive load of government restrictions. The journals sought to recapture the halcyon days of the predepression era.

The dairy journals contained a fair assortment of local gossip and human interest items ranging from letters from soldiers to the recollections of old cattle breeders. The death of Roosevelt was duly noted, and Hoard's Dairyman

even printed a picture of him with a glass of milk in his hand. Editors noted that creameries ought to be pretty, that the dairy industry needed to have a history written, and that breeders could list calves under capital gains for income tax purposes.³

Editors Oppose Raise in Postal Rates

The war naturally interfered with the publishing business. In some instances the editors simply lacked advertisers, and in one case at least a paper shortage forced a reduction in advertisements.⁴ And, there were other sources of irritation. In 1949 the Pacific Dairy Review opposed a raise in postal rates because the editor claimed that such a move would drive publishers out of business, and then the paper makers, and eventually would destroy the nation.⁵ Editors had previously asserted their importance as purveyors of news, but this was the first declaration of their importance in sustaining the national economy.

During the war the sources of news, information, and editorials changed. Earlier editors had composed some material, relied on correspondents for more, and borrowed much of it from other papers. Even as late as 1920 much of the material in any dairy journal was lifted from some other periodical. This technique of clipping or rewriting gave wide currency to ideas and served to supply the journals with a variety of material. By 1940, however, the editors had practically abandoned the older practice and instead engaged in simultaneous clipping. That is, instead of borrowing from one another they printed the publicity reports and news releases of various organizations. An example of seasonal advice may prove interesting. In October, 1950, the Holstein-Friesian World observed: "Now is the time to get your dairy barn ready for winter. At this season of the year a good many barns show neglect caused by the rush of harvest season. While cows have been on pasture during the summer, dirt and cobwebs have accumulated. Windows need washing and in some cases new panes of glass. Ceiling and walls need paint. Equipment needs lining up and repairing." The editor attributed the advice to the Barn Equipment Association of Chicago. In November of the same year the Jersey Bulletin ran the following: "Harvest time is over and a busy summer's work is at end—at this time of the year many barns show neglect caused by the rush of harvest season. So, now is a good time to go over the barns and check them, making ready for winter. Dirt

and cobwebs have accumulated, windows need washing, ceilings and walls need paint.”⁶ The editor gave no credit, but probably he too was on the mailing list of the Barn Equipment Association. All journals used releases of this sort. And of course the organizations supplying the “hand-outs” appreciated the coöperation of the journals.

Editors treated the Second World War both as an opportunity for profit and an unwelcome occasion for government meddling. Unlike other conflicts, however, the war also became a source of spiritual inspiration. In 1941, in his Christmas editorial, the editor of the American Butter Review observed:

Yet let us all find comfort and inspiration in the knowledge that in the unchanging verity of the Spirit of Christmas and all that it connotes rests the sole hope of eventual realization of those ideas without which a comity of nations cannot be achieved nor civilization long endure.

And let us all be sustained in the utter certainty that this great country, welded into indomitable unity in the pattern of its founders, will with its potent allies press forward this unsought war with an all-conquering might which soon or late shall sweep the perfidious Axis barbarians to destruction and restore the world to humanity and justice.⁷

Similar pious sentiments were common in the dairy journals of the early forties. In January, 1942, the National Butter and Cheese Journal asserted: “Patriotism is the greatest power in the hands of a free people to promote such a program as the one the American people are now engaged in. The individual may have held misgivings, but when he is called upon in the name of patriotism he ceases to hesitate. Love of country and his deep concern about its welfare sweep away all his doubts and he enlists for the campaign. This is the spirit which will bring success to the nation.”⁸ As the war progressed, however, the misgivings of the editors came to outweigh their enthusiasm as they witnessed government regulations of prices and wages, establishment of equipment priorities, farm support, consumer subsidies, and rationing. Nevertheless, the journals urged patience in time of stress. In 1945 the Jersey Bulletin observed:

This is no time to sing the blues. Backbone and grim

grit are needed by agriculture. Fortunate for America that it has these characteristics. There is confusion up higher, with changing orders, and both marketing and purchasing restrictions, but the level headed thing to do is to charge it to the war and start from there.

.....
 War and all its damning blight hits everyone, some harder than others, and the farmer is at the bottom of the scrambled heap on every play. We have no patience with those who prate about the "well fed" farmer. It is true that he may have bacon, other meats, eggs, butter, milk, flour and potatoes, but none of these walk up to his kitchen door and ask admittance. He has to go out, long arduous hours, and bring them in and perform other labors that call for hours that would be white slavery in other lines of industry. But the farmer is patient, long suffering, methodical, frugal, and not to be shrugged off.⁹

Except for the customary editorial advice to stop complaining and get to work, the editors did not carry much inspirational material after the end of the war.¹⁰

Editors Devote More Space to Political Affairs

Because of the ever expanding scope of government action in economic life, the editors devoted considerable space to political affairs. Their political ideas were fairly well defined. They did not like government intervention because of alleged confusion in government planning. They opposed the growth of bureaucracy, although they regretted the loss of government assistance which a reduction in bureaucrats implied. Nevertheless, editors were willing to sacrifice, at least sometimes.¹¹ And they were, on the whole, rather anxious to remove the Democrats from office, although the journals seldom put it that way. The oblique approach of the editor of the Pacific Dairy Review was more customary. He merely lamented the low registration for the 1950 elections: "With democracy now threatened as never before, voting is more than a right—it's an important and urgent duty. Records of recent elections in the Western states show that too many have failed to register and vote, either overlooking or purposely ignoring this major obligation of citizenship."¹²

Ever alert to the iniquities of government, the editors warned the industry to beware of inequalities in butter rationing and the "introduction of crack-pot schemes."

Nevertheless, most editors agreed with Gordon, of Dairy Record, when he wrote in 1943: "To be quite blunt about it, we're getting a little weary of requests that are nothing more nor less than a sly appeal for aid in circumventing OPA's butter price ceiling order Just for the benefit of those who may have overlooked the point, America is at war. It's all very well to oppose a bad order and to fight for one's rights, but no man in the creamery business has any right to expect privileges that are not accorded to others."¹³ On the other hand, the editors were quite outspoken about what they believed to be bureaucratic bungling. In 1943 the Pacific Dairy Review insisted there was no reason why industry decisions could not be made in California rather than in Washington, D.C. The editor protested the waste of time and money spent in traveling to and from the Capitol; and in common with other editors, he ridiculed civil servants.¹⁴

In spite of this widespread editorial dislike of bureaucracy, the dairy journalists approved plans to extend farm assistance for three years after the war at 90 per cent of parity. In 1945 Hoard's Dairyman supported the move, and in 1949 Dairy Record signaled the end of farm-trade feuding by declaring that price support was an absolute necessity. On the other hand, the editors denounced consumer subsidy. As Glover of Hoard's Dairyman put it in 1945: "It would seem that the only sensible thing is to permit food prices to advance when consumers, as a whole, are best able to pay these prices. It would seem that in deferring the payment of food to a future year when conditions may not be so favorable, we are doing a real disservice to the consumers of the country."¹⁵ Apparently it made a difference who received the assistance.

When the war ended in 1945 the editors had demanded the end of butter rationing, although at first they generally believed that price controls would have to remain.¹⁶ Within a year, however, the editors demanded the removal of price controls and were then unpleasantly shocked to discover that consumption declined as prices rose. This economic reaction formed the chief dilemma for the editors who favored free enterprise but who were nonetheless unhappy with its action. Still, the editors professed to see some advantages in the market situation. In 1946 the National Butter and Cheese Journal reported: "Because of the immediate high demand, all dairy products will be scarce. Slowly, but surely, the higher prices will increase production and the

dairy industry in general should be facing a generally prosperous period ahead."¹⁷ Uncontrolled prices did not lend to market stability, however, and all segments of the industry were faced with uncertain marketing prospects.

Editors Approach Brannan Plan with Caution

And then in 1949, Secretary of Agriculture Charles Brannan reopened the free enterprise controversy by proposing a new plan of price supports which in essence subsidized the farmer while letting prices fall to their natural market level. At first the editors approached the plan with caution. In April, 1949, Dairy Record listed twelve good points in favor of the plan, noting among other things that "1. It emphasizes the need of producing things that people will consume, and shifts emphasis to dairy products and meat.... 2. It means better nutrition for the consumers of the nation.... 3. It makes economic sense in that it provides for the consumption of surpluses...."¹⁸ Gordon, of Dairy Record, also listed twelve objections which boiled down to a dislike of the plan because it was politically inspired and contrary to economic law. One month later, in May, the Pacific Dairy Review attacked the plan on the ground that it would lead to the destruction of the liberties of free men and that it would not work anyway. In July, 1949, the Creamery Journal joined the fight: "It seems incredible that the farmers of this country will permit themselves to be duped into trading their freedom for a guaranteed scale of prices which probably couldn't be maintained long. They better think twice and start some hell-raising action before it is too late."¹⁹ By August, 1949, Dairy Record abandoned its stand of April: "Are we expected to trade our birthright for a mess of pottage? Is the member of a labor union so blind to his own and the country's welfare that he will vote for the man who promises him most, regardless of the effects upon the nation's economy? Is the farmer so devoid of all scruples that he will trade his vote for a promise of a high price, regardless of how economic may be that price or the methods by which it is paid?"²⁰ By 1950, comment on the Brannan Plan no longer appeared in the dairy journals.²¹ In condemning the plan, editors had maintained their earlier position of opposition to consumer subsidies. The Brannan Plan was in effect also a consumer subsidy, for as editors noted, it offered lower consumer prices for food and the difference between price to consumer and parity price to the farmer would have to be made up in taxes. The

farmer was to receive the money, but the consumer was also to benefit. As a result of their opposition to this plan, the editors talked themselves into opposing all farm support. They thus reversed their position of 1949.

In April, 1950, the National Butter and Cheese Journal characterized farm price supports as a hangover from war days, which like all hangovers was producing a headache. In May, 1950, Dairy Record asserted that any farm program should be designed to prevent farm depression, not foster farm prosperity. In short, by 1950 the dairy journals agreed that farm subsidies would have to end because "no one to date has ever been able to defy the law of supply and demand and get away with it."²²

Nevertheless, segments of the industry attempted to gain subsidies. In 1949, while the controversy over the Brannan plan still raged, Dairy Record reported that "action of the American Bakers Association in rejecting the dairy industry's proposal that the government subsidize the use of milk solids in bread was disappointing, but not entirely unexpected. Many informed dairymen had sensed the antagonism to the proposal despite reassurance of some bakery leaders.

.....
The question, then, is what should be done to expand the market for dry milk solids, for it must be obvious to all who have given even casual thought to the subject that the government cannot be relied upon indefinitely to bail out dry milk producers."²³

By June, 1950, the dairy industry was threatened by a surplus of seven billion pounds of fluid milk. The editors asserted that some solution had to be found. M. S. Prescott of the Holstein-Friesian World blandly proposed that Americans should drink up the surplus and that the ever increasing population should make this possible. No other solution seemed to be in sight, except unwelcome government assistance.²⁴

The theory of free enterprise was also challenged by price wars in the New York milk market. In 1950 the American Butter and Cheese Review observed:

When the federal and state milk control programs were inaugurated in the early 1930's, the policy was to fix prices all along the line, from the farmer's gate to the consumer's doorstep or the store counter. Within a few months, however, the federal policy was changed in

the direction of regulating only the prices paid producers, allowing the resale prices and margins in markets under federal control to be determined by competition.

.....

The new policy worked quite well during the war period when there was a ready market for all milk produced. Recent developments, however, give new reason for doubt as to whether competitive elements in the milk trade of New York and other large cities will operate continuously in the public interest without other forms of regulation.²⁵

The industry and its press were in a quandary. They seemed to want and yet did not want government intervention.

Dairy Industry Sees Need for More and Better Advertising

Meanwhile, editors insisted on greater promotion of dairy products, although the campaign almost ended during the war because of reduced need. Even in 1942, however, Dairy Record warned the industry that group advertising was essential but should be done carefully. The journal noted that many attempts at group advertising were more harmful than beneficial because of unappetizing displays. In 1947 the National Butter and Cheese Journal approved a \$5,000,000 industry appropriation for advertising and promotion. In later years editors re-emphasized the need for greater promotion, especially for butter.²⁶ In 1950, the Pacific Dairy Review voiced a common complaint as it paid tribute to scientists: "The unpaid salesmen have done a magnificent job of selling milk and milk products, remarked President Milton Hult of National Dairy Council at the dairy industry meetings in San Diego. He named scientists, nutritionists, dietitians, physicians and home economists who are interested in betterment of the human body. Hult is right. We have accepted the gift and done a meager job of selling ourselves."²⁷ About the only innovation in promotion centered on the efforts of various breed associations to sell their special milk. These efforts had been in progress for some time, but it was not until the 1940's that the journals gave them much attention. In 1950 the Jersey Bulletin carried a typical example of this type of promotion when it noted: "JERSEY CREAMLINE IS YOUR OPPORTUNITY."²⁸

See Need to Sell Price as Well as Product

From time to time editors also insisted that the industry concentrate on selling the price as well as the product. In

1947 the American Milk Review complained: "There are good and sufficient reasons why the price has gone up but the whole point of the discussion is that the public does not know what these reasons are. The public thinks that milk dealers are making eight cents or more per quart. The public thinks that price increase is profit increase. We cannot, under these circumstances, maintain the goodwill essential to the conduct of business unless we offer an explanation."²⁹ The problem of explaining high prices continued to plague the industry through 1950.³⁰

Meanwhile, cold storage lockers and frozen foods attracted the interest of various sections of the industry, especially the ice cream manufacturers. The editors reported developments in frozen food processing and suggested that creameries and ice cream plants might find the business a profitable side line.³¹

Since the price of butterfat was tied to butter, and since the government supported butter prices, the ice cream manufacturer was caught with increasing and unavoidable costs. After 1946 the chief concern of the Ice Cream Trade Journal, next to promotion, was the effect of rising prices. The editor, like others in the industry, attributed most cost rises to labor. In 1948, V. Rabuffo, of the Ice Cream Trade Journal, advised manufacturers to worry less about repeal of the Taft-Hartley law and worry more about quality of products. He also advised manufacturers to reconsider the profitability of the new types of outlets which had come into prominence by 1950. The editor doubted that gasoline stations and theaters were always profitable ice cream outlets.³²

Editors Complain of Retailers' Trade Practices

After 1947, complaints about the rascally tricks of retailers mounted. And the complaints were not restricted to any special class of dairy products. In 1947 the National Butter and Cheese Journal remarked: "It beats all how slow some retail distributors of butter and cheese are in lowering their prices so as to conform to lower wholesale prices. They seem to lose all contact with market quotations just as soon as the market starts going down. Then they seem to go blind, deaf and dumb all at once. But let the market start up, and they promptly know all that is going on about them!"³³ In 1948 the Ice Cream Trade Journal added its voice to the outcry: "When the last general raise went into effect in most markets about a year and a half ago, there

were repeated instances of dealers who took the cent or two a pint raise as the case was, and stepped up their consumer resale price a nickel or even as much as a dime a pint. Obviously, whenever his customers rebelled or criticized, it was extremely unlikely that he shouldered the blame himself. He was more inclined to shrug his shoulders helplessly and lay all the blame on the ice cream manufacturer for the advance."³⁴ In 1949 Dairy Record joined the campaign against ice cream bootleggers which the Ice Cream Trade Journal had begun in the early thirties. Gordon wrote: "One of the meanest practices with which the ice cream manufacturer must contend is that of retailers who substitute different brands for the established names that bring customers to their stores. This practice is general throughout the nation, but it is particularly rife in the east where little hole-in-the-wall ice cream manufacturers are more numerous than in most other sections. So bad has the practice become, in fact, that established ice cream firms in northern New Jersey have launched a war to halt the practice."³⁵ The editor wished the manufacturers luck in their battle, but there was little else he could do or suggest. In 1950 Gordon also protested the high retail price of ice cream: "Retail ice cream prices are still too high, despite the fact that wholesale price cuts have been rather numerous. Manufacturers are bemoaning the fact but they are doing nothing about it, lest they offend a few 'stops.' No doubt they will act about the time they lose half their business, but then it will be too late."³⁶ By August, 1950, the Butter, Cheese and Milk Products Journal decided that the dairy industry would have to do something about retailers, although the editor could propose no solution. Nevertheless, Slater explained: "Because price which the consumer pays for a product determines to a large extent what she will buy, we believe what the grocer charges for butter and cheese is of vital importance to the milk products manufacturer. Possible methods for regulating consumer prices merit the study and intelligence of the entire industry."³⁷ Still, there seemed to be no way in which the industry could control its retail outlets, except for possible government regulations.

While most of the editors complained about retailer tactics, only one worried about the maneuvers of manufacturers. The National Butter and Cheese Journal was particularly disturbed by the various changes in production. During the war the editor lamented the tendency of creameries to shift into cheese making when there were already shortages. As

a result of these shifts, various substitutes, including oleomargarine, increased in use during the war. In 1947 Slater warned: "Operators of flexible plants who switch completely from one product to another to profit by current price advantages of certain products, sometimes find it difficult to find a ready market for a product which they temporarily ceased to manufacture."³⁸ Nevertheless, the practice seemed to continue.

And of course, the problem of substitutes continued to recur. After the war the dairy journals noted more with curiosity than alarm that all branches of the industry were threatened with competition from substitutes. In 1948, for example, the Ice Cream Trade Journal inquired "Is a Frozen 'Oleo' Product Coming?" and in 1949 the Creamery Journal complained that the industry was no longer fighting as it had once fought oleomargarine: "Substitution of vegetable oils in various dairy products is becoming more of a problem as advocates of such substitution become bolder in their actions. Some years ago there was some experience with filled milk and the dairy industry rose up pretty much as a united body to bring about federal squelching of that product. But on the whole the dairy industry has not viewed the vegetable oil threat with too much concern, or at least has not been completely united in opposing threats as they make their appearance."³⁹ As though to prove the editor right, in 1950 the Ice Cream Trade Journal quietly observed that Dairy Queen, a confection based on vegetable oils and resembling ice cream, was increasing in sales and outlets. The Journal did not, however, proclaim a holy war on the intruder, but instead cautiously reported that "the steady growth of the Dairy Queen project has been a matter of constant discussion and examination by the ice cream industry and the statement that 807 units were in operation at the time of the convention, establishes officially, the extent of that growth."⁴⁰ In 1950, Dairy Record suggested that each creamery check bear the slogan: "Don't Spend Me for Dairy Imitations." Apparently farmers were still liable to sell high-priced milk and buy substitutes.⁴¹ The tone of the editorial, however, showed the old fire and determination fading. The editors were losing heart.

The fight against oleomargarine temporarily reached a new intensity, subsided and eventually ended in defeat for the dairy industry. In 1941 the editors denounced the ruling of Federal Security Administrator Paul V. McNutt which permitted "inclusion in the product of diacetyl, butter

simulating flavoring ingredient." But the editors also won a few victories. In 1942 the National Butter and Cheese Journal joyfully noted that oleomargarine sales had decreased since 1940 and that in June, 1942, the General Federation of Women's Clubs had refused to endorse oleomargarine. This fight along the home front occupied considerable editorial space. In 1942, Dairy Record observed that a pamphlet entitled "Home Budgets for Victory" contained: "Thirty days of low cost menus . . . , three meals a day, and not one calling for butter. But how 'margarine' (no such thing legally) goes to town! Every menu calling for a spread specifies it. Poor old butter never gets a break; where it appears at all, it's always in bad company—that old 'butter or margarine' saw."⁴² In 1943 and 1945, editors noted that the Russians, when specifying lend-lease foods, resolutely rejected oleomargarine and insisted on butter. The editors drew invidious comparisons between a government which recognized the value of butter and one which did not.⁴³ In 1943 Dairy Record found that manufacturers of cooking fats sometimes specified butter in their sample meals, a fact which the editor interpreted as a sign of fear of the dairy industry.⁴⁴ One year later in 1944, the industry successfully beat off an attempt to end the oleomargarine tax.

In 1945, Hoard's Dairyman resurrected the artificial color question and suggested that purple would be a good shade for oleomargarine. The editor declared that manufacturers insisted on yellow only because they wished to imitate a superior food. In June, 1947, editors gave credence to the claim by announcing the publication of a booklet which exposed the fraudulent sale of oleomargarine. The exposé was based on "six typical cases cracked by Internal Revenue agents."⁴⁵ Meanwhile, the oleomargarine manufacturers continued to seek repeal of the restrictive tax, and at the same time the editors gradually shifted to new ground. Instead of defending the tax on colored oleomargarine, they merely proposed to prohibit the product altogether. The consumer could then buy oleomargarine, but only in its natural color.⁴⁶

The plan of attack was just taking shape when it was disrupted by the unexpected result of the 1948 elections. The victory of Harry S. Truman was accepted by the dairy journals as the beginning of the end for restrictive legislation. The Ice Cream Trade Journal speculated on the interest that ice cream makers had in the problem and decided that as long as government supported the price of butter, the

free sale of oleomargarine would not reduce the price of butterfat for ice cream manufacturers. The editor tentatively and unenthusiastically supported the tax on oleomargarine. But the first breach had been made. Ice cream makers were no longer interested in oleomargarine competition. In the same year the American Butter and Cheese Review outspokenly recommended that the dairy industry surrender the fight and concentrate instead on merchandising. As Norman Myrick of the American Butter Review put it: "Again may we ask a question? Instead of fumbling around on the eventually losing side in a battle which to us seems as outmoded as an engagement in the War of 1812, why not all of us in the dairy field get together behind the American Dairy Association, the National Dairy Council, and others, to give them funds and support to sell butter—the best edible fat of all—against any competition!"⁴⁷

There was of course no editorial unanimity on the proposal. In 1950 Hoard's Dairyman sounded the call to battle as it had done regularly since 1885. W. D. Knox urged his readers to bombard their congressmen with protests and insisted that industry members go to Washington to pressure the Congress. If they all acted promptly, the danger might be averted.⁴⁸ The Pacific Dairy Review was frankly puzzled at threatened government action: "It seems strange that the administration which has purchased up to 90 carloads of butter in one week in order to support the great dairy industry should be interested in changing regulations so that 28 manufacturers of oleo can sell more of their produce—and thereby make it necessary for the government to use more of the taxpayers' funds to support dairy markets."⁴⁹ The protest was unavailing. By February, 1950, the dairy industry and press had lost its fight and in July the new law repealing the oleomargarine tax went into effect. For the first time since 1902, oleomargarine was no longer subject to a federal tax. Faced with this fact, the editors united to demand better selling methods, for as the Butter, Cheese and Milk Products Journal remarked: "WE SINCERELY BELIEVE that dairy trade associations can better serve their members if they will devote more time to developing and promoting merchandising ideas and less to legislative efforts aimed at getting special protection for the dairy industry. The greatest protection any business can have is a constantly expanding market for its products."⁵⁰

Dairy Editors Complain of Attitude of Daily Press

Nevertheless, in spite of a cheerful countenance, the edi-

The New Oleo Law — How You Can Help Enforce It

Congress tried to legislate a degree of honesty into the oleo industry. Here are the specific requirements that must be fulfilled when oleo is made and sold.

Every dairyman should know these safeguards and help enforce them. There are four habits that should become routine with every dairy farmer in the country.

THE law repealing federal taxes and license fees on oleomargarine went into effect July 1, 1950. It contained seven provisions designed to protect consumers and dairy farmers against fraud and deception on the part of the oleo interests. These seven safeguards are important to you. It is your right as a dairyman to see that they are observed. It is your duty, as a citizen, to insist that they be enforced. Here are the seven safeguards:

1. **Sanitary Requirements:** Oleomargarine is now deemed to be adulterated if any of the raw material used therein is filthy, putrid, or decomposed. This provision imposes on oleo raw material the same sanitary standards applied to milk or cream going into butter.

2. **Packaging Restrictions:** All oleomargarine must be packaged for retail in units of one pound or less. This clearly prevents the sale of bulk oleomargarine.

3. **Labeling:** All packages must carry the word "oleomargarine" in type at least as large as any other type on the label. Each part of the contents must also carry the word "oleomargarine" in type no smaller than 20-point (about 1/8 inch).

4. **Truthful Advertising:** It is now unlawful in connection with oleomargarine advertising to represent or suggest that oleomargarine is a dairy product. This is intended to prevent the use in oleomargarine advertisements of grade designation, dairy scenes, or dairy terms commonly used in advertising butter.

5. **Identification of Ingredients:** The oils used in oleomargarine must be specifically named, although the actual or relative quantities of the ingredients need not be stated. A truthful, accurate, and full statement of all the ingredients of oleomargarine must be given on the label.

6. **Public Notice When Oleo Is Served:** A public restaurant must give notice when oleomargarine is served, either by displaying a wall placard to that effect or by printing a notice on the menu.

Individual servings of oleomargarine must be identified either by using triangular-shaped patties, or by labeling on the container or accompanying each serving.

7. **Penalties for Violations:** Violations of provisions relating to packaging and restaurant serving of yellow oleo are punishable under the Federal Food, Drug, and Cosmetic Act. First offense may bring a fine of not more than \$1,000 or imprisonment for not more than one year, or both.

Second offenses could be fined up to \$10,000 or imprisonment for not more than three years, or both.

The penalty provision of the Federal Trade Commission Act (applied to misleading advertising) has been increased. Each day of a continuing violation is punishable by civil penalty up to \$5,000 per day.

What You Can Do

Here is what you can do to help the dairy industry and the Food and Drug Administration make certain honest merchandising practices are followed by the oleo interests:

1. **Every time you eat in a public eating place, hotel, restaurant, or club, look around and see if signs reporting the serving of oleo are displayed. Check the menus for such notice and watch how the table spread is served.**

2. **If no notices are posted on the premises or on the menu and you are suspicious that the table spread is really oleo, call it to the attention of the waiter or manager. Point out to him the advantages of serving butter and the health-**

ties he risks by serving oleo without meeting the notice requirements of the law. If he persists in violating the law, send him a report to the National Milk Producers Federation, 1731 Eye Street Northwest, Washington 6, D. C.

3. **Every time you go into your super-market or neighborhood store, look over the display of oleo, see if any of the regulations and laws are being violated. Report any violations or any doubtful activities to the National Milk Producers Federation. In particular, report any instances of oleo being represented or sold as a dairy product.**

4. **Keep this explanation of the law and regulations on hand at all times. Offer it to any restaurant retailer, editor, or radio commentator who may want to know what the law provides. Additional copies in pamphlet form may be obtained from the National Milk Producers Federation.**

Packaging Regulations for Retail Sale

The oleomargarine industry must conform to the standards of the Food and Drug Administration in respect to the manufacture and sale of butter substitutes. The Food and Drug Administration has issued statements of general policy or interpretation in regard to the labeling of oleomargarine. Here they are. Read them carefully:

A. Section 403 (g) of the Federal Food, Drug, and Cosmetic Act says that any article represented as oleomargarine must meet the definition and standard of identity set for oleomargarine under the Act. This means that its label must bear the name "oleomargarine," which is the name specified in the standard. Oleo manufacturers cannot legally call this product "margarine" until the standard is amended.

B. The identity standard for oleomargarine as set by the Food and Drug Administration requires that only some of the optional ingredients shall be declared on the label. A new section (407) of the legislation recently passed by the Congress amends the Federal Food, Drug, and Cosmetic Act in this respect. The law now requires, in the case of colored "oleomargarine," a full and accurate statement of all the ingredients. The names by which such ingredients shall be declared are listed below:

1. The rendered fat, oil, or stearin obtained from animals must be declared by name—for example, "beef fat."

2. Vegetable fats and oils must be declared by name—for example, "cottonseed oil" or "soybean oil." If such oils are used in combination, the principal oil in the mixture should be listed ahead of those which are used in smaller quantities. If the oil or oils are hydrogenated, the label must say so—for example, "hydrogenated cottonseed oil" or "hardened cottonseed oil."

3. Optional ingredients such as cream, milk, skim milk, water, butter, and salt should be declared by those terms. Dried skim milk should be listed as "nonfat dry milk solids" or "defatted milk solids."

4. Artificial color and artificial flavor

should be declared as such. They need not be declared by the names of the specific colors or flavors.

5. The presence of sodium benzoate or benzoic acid should be declared.

6. The optional ingredient vitamin A may be declared merely as "Vitamin A added" or "with added Vitamin A." The same terms may be used when vitamin D is added.

7. Emulsifying ingredients such as lecithin, mono- or diglycerides and sodium sulfoacetate derivatives or mono- or diglycerides should be declared by those terms.

C. The Food and Drug Administration says that factors other than the mere height of the lettering are involved, when it comes to determining whether the word "oleomargarine" is in type as large as any other type on the label. The type or lettering of the word "oleomargarine" must be compared with the rest of the label from two standpoints:

1. **The Area of Each Letter:** This is measured by a closely fitting rectangle drawn around each letter. The area of each letter in the word "oleomargarine" must equal or exceed the area of other letters elsewhere on the label. If a single letter in the brand name, for instance, is the largest type on the label, each letter in the word "oleomargarine" must be at least as large as that letter.

2. **The Boldness of Letters:** Boldness applies to the breadth or "weight" of the lines forming the letters. The word "oleomargarine" must have letters equaling or exceeding in boldness and prominence any letters elsewhere on the label.

4. **The word "oleomargarine"** must appear on any panel of the package label that might reasonably be selected by the grocer, for display purposes at the point of sale. In other words, any side or end of the carton that faces the customer should carry the word "oleomargarine" to distinguish it from a butter carton.

E. It was the clear intent of Congress that any article which purports to be oleomargarine is misbranded if it fails to comply with the definition and standard of identity for oleomargarine. This ban on an article which fails to comply with federal definitions and standards has been applied, up to now, to oleo sold within the same state in which it is manufactured. By the terms of the new Section 407, however, colored oleo sold within the state or territory in which it is produced is now subject to the same federal regulations as if it had been introduced into interstate commerce.

F. The provision requiring the word "oleomargarine" to appear in type not smaller than 20-point means that the height of the actual letters must not be less than 20/72 of one inch.

G. **Wrapped quarter-pound sticks of oleomargarine** may be units of retail sale in some cases. Therefore, the wrappers should be individually labeled according to the regulations listed above, just as if they were one-pound cartons.

Regulations for Restaurants

Any public eating place must, if it serves oleo. Post a sign or signs saying that oleo is served the premises; or have a notice on the menu reporting the serving of oleo.

Any public eating place must also serve such serving or put in triangular shape or clearly mark the disk or paper on which the oleo is served.

Any restaurant or public eating place serving oleo must, therefore, call it to the attention of their customers at least twice. **THE END**

Even after the repeal of the federal tax on oleomargarine, Hoard's Dairyman continued to lead the fight against the sale of oleomargarine as butter. —Hoard's Dairyman, October 10, 1950.

tors did not accept their defeat calmly. In August, 1950, R. E. Jones complained in the Pacific Dairy Review that the daily press misunderstood the result of the law. He insisted that agriculture needed better public relations.⁵¹ In September Hoard's Dairyman attacked Congress for failing to give consumers enough protection from fraudulent sale of oleomargarine. Knox of Hoard's Dairyman declared that:

When the pro-oleo law was passed, the Food and Drug Administration and the Bureau of the Budget estimated that enforcement of the law would require an expenditure of \$6,000,000 per year. When the senators and representatives put their stamp of approval on the theft of butter yellow, a great share of our congressmen asserted that they were taking every precaution to assure that fraud would not be perpetrated on the public.

On July 24 the United States Senate had before it the appropriation for the Food and Drug Administration. Instead of the \$6,000,000 required to force honesty on the oleo industry, \$624,000 was provided, Senator Lehman of New York asked that the appropriation be increased to \$936,000. Even that increased sum to the Food and Drug Administration would allow an inspection of but one out of five eating places a year. Surveys have been made showing that oleo and fraud go hand in hand. Testimony given before the Senate Finance Committee last year disclosed that in Pennsylvania 153 out of 500 public eating places, which were inspected, were violating the law against the substitution of oleo for butter without notice to the public.⁵²

In its long war against substitutes, the dairy industry was at length on the defensive.

In the early days of the war, editors warned that something would have to be done to keep prices up once the government buying program ended. By 1945, however, the editors realized that the world was hungry and that reconstruction of the European economy might keep prices high for some time to come. Nevertheless, the Creamery Journal, for one, observed that European countries had managed to maintain their dairy production fairly well. The editors cautiously supported the Marshall Plan, although they admitted that the immediate consequences for the dairy industry were not at all clear.⁵³

Meanwhile, journalistic reaction to tariff revision and reciprocal trade pacts was confused by an editorial desire to strengthen the world economy and yet protect the butter

industry. After the end of the war the editors believed that presidential power to reduce the tariff by 50 per cent was perhaps dangerous. Such power, they asserted, could be used to crush the dairy industry. On the other hand, they felt all tariff schedules might well be reduced. In 1950, however, when the butter tariff was threatened, Myrick of the American Butter and Cheese Review declared that the proposed reduction had made a basic food into a political football. In the pinch, editors did not approve a reduction in butter protection.⁵⁴

Even farm advice was linked with government action. As in time past, editors stressed the need for adequate farm bookkeeping, but after 1940 the emphasis was directed toward tax records. In 1944 the Holstein-Friesian World advised farmers to be sure to deduct losses of livestock from income tax payments. At the same time the editor warned that loss of a prospective crop could not be deducted, since it represented only anticipated profits. Detailed tax advice became more frequent after 1940, while before that date it had not even been considered. Meanwhile, the experience of the First World War caused editors to warn farmers not to buy land at inflated prices.⁵⁵

Editors Continue to Gloss Dairy Farming

During and after the Second World War the editors continually urged farmers to undertake dairy farming. In 1949 Gordon of Dairy Record noted:

North Dakota is going back into the dairy business. Its farmers dispersed their herds to a dangerous degree during the wartime craze for wheat, and now they are forced to rebuild them as wheat is no longer a golden lure.

The case of the Bottineau cooperative creamery is somewhat typical. A year ago it was forced to import milk from Minnesota to take care of its local bottling trade, but during the past few months it has brought in more than 100 head of Holstein cows and its owners hope soon to be able to operate entirely with local milk supplies.⁵⁶

The editor ended his remarks with the customary admonition: "Always it is the Dairy cow which can be counted upon for bread and butter income when the gilt of high prices has tarnished."⁵⁷

The editors generally included a wide variety of farm

advice, most of which was markedly seasonal in nature. At the same time the advice was almost always taken from a publicity or news release. Information ranged from the care of lambs to ways of preserving egg quality. The main editorial interest, however, centered on the proper handling of bulls. Owners were told to lead bulls only by steel shafted hooks and to be wary of all bulls. In 1945 Hoard's Dairyman cautioned: "The so-called 'good natured bull' is the one that kills. Let it be remembered that no bull can be trusted. Treat them all as though they were vicious and we are sure we'll read of fewer deaths from bulls attacking their owners." ⁵⁸

Perhaps the most potentially controversial development in dairy farming was the inauguration of experiments in pen stabling. In 1950 the Holstein-Friesian World expressed the first detailed report on the subject:

One of the most discussed subjects among dairymen is the question of pen-stabling with its advantages and disadvantages. We present in this issue two articles on this subject. One is the official report of four years of the long term experimental work in progress at the University of Wisconsin.

The results of this experiment are quite striking in the amount and efficiency of production but probably most of all in the incidence of acute mastitis.

The other article tells the experience of a Holstein breeder, who is changing back to stalls and stanchions after trying out the loose stable method. His points seem to be well taken but leave out some questions as to whether some more efficient arrangement of his pen-stabling layout might not have cured some of the defects mentioned. ⁵⁹

Feeding advice hardly differed from what had been offered before. Grass silage was emphasized more than formerly, and farmers were told moldy corn was good feed. These were about the only innovations. Editors still recommended good full feeding, and as Slater of the National Butter and Cheese Journal remarked in 1942, "Just ahead lies the annual headache for creamerymen who operate in sections where wild onions and garlic thrive. Only the cows like them." ⁶⁰ The editor did not offer any advice to the farmers, nor did he recommend that his readers employ chemicals to remove the taint. Aggressive advice had changed into observations and complaints.

Disputes among Breed Journals Disappear

At the same time, competition between breeders, and especially between breed editors, practically disappeared. The process begun in the 1920's was completed by 1950. In 1944 the Holstein-Friesian World carried a letter from the Jersey Club secretary of a kind which would have been unthinkable in the days of Jenkins and Houghton: "We cannot resist the temptation to get into your busy letter box with a bit of sincere thanks for your very charitable handling of the news item on the recent Jersey Sale of Stars. Your words of congratulation to a sister breed cannot but augur well for the proper feeling that should and must prevail among all of us in the registered cattle field."⁶¹

Breed journals also exhibited a new interest in youth. The Jersey Bulletin carried a regular page devoted to Jersey youth, while in 1949 the Guernsey Breeders' Journal announced that juniors could enter the National Guernsey show. Thus the editors shifted from seeking to extend the breed to educating the children of breeders in the virtues of pure-breds. The breed journals continued to carry accounts of sales of cattle and sketches of famous breeders or herds. And, in 1950 the Jersey Bulletin again asserted that the Jersey cow was better adapted to various climates than any other breed.⁶²

Without doubt, artificial insemination was the most important innovation in the art of cattle breeding. The first serious press notice of the development appeared in the Jersey Bulletin in 1945 in an article by H. B. Ellenberger. As Ellenberger noted, however, the idea was not exactly new: "The first organized dairy cattle artificial breeding association in the United States was started in New Jersey in May, 1938. This work was begun in Vermont and elsewhere on an experimental or demonstrated basis later in the same year and a few other associations were started or were being organized in the fall and early winter."⁶³

Editors Cautious in Writing about Artificial Insemination

In 1945 the editors approached the subject with caution and objectivity. In October of 1945 the Jersey Bulletin in announcing its annual Bull Special, an issue largely devoted to advertisements of bulls, made only passing reference to artificial insemination. The process was not regarded a threat to breeder prosperity. In 1950 the Holstein-Friesian World announced that "starting in October, application for

registry will be received for animals resulting from artificial services after the first of January of this year. This will bring into effect a requirement relative to registry of these animals which was established by The Board of Directors at its meeting in June, 1949. Although this requirement has been widely publicized, perhaps it bears repeating since it will affect more than 20 % of the animals registered in the future."⁶⁴ Thus had artificial insemination spread. The new regulation required that the serving sire be blood typed before his progeny could be registered. The editors did not in any place actively recommend artificial insemination. Every breed journal carried huge amounts of advertising, most of it devoted to bull sales. On the other hand, as of 1950, the editors did not oppose artificial insemination. Hoard's Dairyman merely commented that perhaps artificial insemination placed too much emphasis on the bull and not enough on the cow.⁶⁵

Editors handled a vast range of material on dairy product processing. As in years past, a new casein fibre was announced, scientists were praised for work in developing new dairy products, and as before, the journals carried columns on butter making and similar subjects. During the war the editors noted that maintenance of old equipment was a vital necessity, while the editor of the Ice Cream Trade Journal continued to urge an ice cream-frozen foods connection. In 1948 the American Butter Review reiterated the ancient warning that consumer preference came first in deciding butter packaging.⁶⁶ About the only innovation in butter making of interest to the editors was the invention of the continuous process of manufacture. In 1946 the Creamery Journal briefly reported: "This process, as many in the trade are not aware, takes the incoming cream, pasteurizes it, extracts the fat in the finished form of butter, and will deliver the product printed and wrapped without the touch of human hand. The process embodies economic potentialities which will undoubtedly have an important bearing on the future of buttermaking and creamery operation."⁶⁷

Meanwhile, the quality of dairy products continued to interest the editors. By 1941 the editor of the American Butter Review apparently abandoned the idea of teaching farmers to produce, or processors to accept only high-quality cream. He tended to recommend compulsion as the only reliable solution. Slater of the National Butter and Cheese Journal insisted that quality could be improved if anyone was really interested, but that no one actually cared.

He asserted: "Don't make the mistake of thinking that the farmer cannot produce good milk. He can produce good milk all right if he can't sell the other kind."⁶⁸ In 1948 Dairy Record arrived at essentially the same conclusion. And in 1950 the National Butter and Cheese Journal described a situation which editors had consistently attacked since the first agricultural periodical appeared in 1810. As Slater raged: "Is there any possible justification for the presence of dirt—yes, just plain dirt—in milk and milk products when offered for sale?"⁶⁹ The editor then lamented that even laws failed to force cleanliness when the enforcing officers neglected their duty. The old problem of cleanliness still remained.⁷⁰

The war naturally introduced changes in transportation techniques. From 1904 to 1941 Dairy Record had consistently opposed the practice of creamerymen picking up milk from the farmers. By 1942, however, the war forced a change in attitude. Gordon explained: "Creameries which have been so fortunate as to have their cream or milk placed on their unloading dock had better take steps immediately to formulate plans for truck procurement. As farmers' tires become worn out they are going to demand that their produce be picked up on their farms. The demand will probably come very suddenly, and if it isn't met just as quickly as it arises the farmer will patronize a plant which gives such service. It isn't wise to wait until it comes before making plans."⁷¹ The National Butter and Cheese Journal discussed the problems of creameries which were already picking up milk. In 1942 Slater warned that such creameries had better consolidate routes before the government acted because "gasoline and rubber wasted in operating overlapping cream routes is inexcusable under present conditions. Such a condition in any territory is bad enough in peace time, but it can't be tolerated now. It will not be tolerated for long, and creamery managers must decide whether they will straighten matters out or whether the job shall be done by the government. Having the government do it is the hard way."⁷² Both Gordon and Slater insisted that routes be consolidated, but no other editors expressed concern about the problem. The only other real interest in transportation concerned door-to-door delivery of dairy products. In 1942 Dairy Record reported a new reason for returning to horse delivery: "If gasoline rationing is added to the rubber shortage to restrict the mileage of motor vehicles, there is one company that does not propose to be caught napping. It is going back to

horses and its converted 'wagons' will have wooden tires."⁷³ The editor approved of the idea, although there were few reports of similar incidents. Nevertheless, those firms which had gone into horse carriage delivery during the depression may well have retained that type of delivery after 1941.

As in previous wars, the dairy industry suffered from a shortage of labor. The editors recognized two primary aspects of the difficulty, the first of which was the draft. From 1942 to 1946 the editors ran articles like "TO EASE DRAFT PAINS," "RE-CHECKING DEFERMENTS," "MUST RETAIN KEY FARM WORKERS," and similar articles.⁷⁴ Editors continually insisted that draft requirements should not touch needed farm workers, and in 1945 the Creamery Journal suggested that dairymen exert such influence as they could on local draft boards. As the editor saw it: "All local draft boards should have it impressed on them what the effect of inducting farm youths urgently needed at home will be. Many boards seem to understand the situation but it appears that many others for a variety of reasons either cannot or do not want to recognize the seriousness of the situation."⁷⁵ The second part of the labor problem revolved around unions. Throughout 1942, editors attacked the efforts of John L. Lewis to organize the dairy farmers of the Midwest. By 1943 the editorial campaign ceased as suddenly as it had begun, probably because returning prosperity made organization of dairy farmers unnecessary, even from the farmers' viewpoint.

Dairy Editors Oppose Labor Union Invasion of Dairying

Dairy journals violently opposed all labor union activity. From time to time the Pacific Dairy Review urged employers to give adequate consideration to the desires of workers and to treat them well, but on the whole, when dealing with labor problems, editors confined themselves to denunciations of unions. The editors insisted that labor unions were irresponsible, that too often they were violent, and that they almost invariably made excessive demands. Editors did not outspokenly support the Taft-Hartley Act, although they had urged some such legislation for some time.⁷⁶ One of the few references to the act was made by the American Milk Review in 1947 when the journal tacitly admitted that the proposed law deprived unions of rightful privileges. The editorial writer recounted an incident where a dairy had been ruined by labor trouble and where the former owner

had then testified before the House Labor Committee. The writer then remarked: "Once more we are reminded of the truism that it is the abuses of a few that all too frequently deprive the many of their rightful privileges."⁷⁷

The Taft-Hartley Act did not solve the labor troubles of the dairy industry. In 1948, in discussing the possibility of lower ice cream prices, the Ice Cream Trade Journal observed that "over everything, however, hovers the question of labor. Will there be another round of demands for wage increases for workers inside and outside the ice cream plant? Certainly there will be no reduction."⁷⁸ Editors also denounced labor unions for drawing workers from the farm by means of high wage scales, and in 1948 Dairy Record suggested that farmers oppose candidates who had CIO backing. In 1950 Hoard's Dairyman discovered that labor unions were supporting repeal of the oleomargarine tax. The author of the article, Reid Murray, urged that labor unions in the dairy industry be used to counteract CIO. The appeal apparently came too late.⁷⁹

Editor Opinion Varies on Disease Control

During the war, editors noted little progress in veterinary science. In 1945, Hoard's Dairyman combined an attack on disease with a reiteration of the ancient plea that low-producing cows be eliminated. The author declared that "it is well at all times to be directed toward eliminating disease from the dairy herd but we are undoubtedly approaching the time in the near future when it will be necessary to eliminate diseased animals and low producing animals in order that dairy production be placed on a more efficient basis. We must never forget that efficiency in production provides the biggest opportunity for a dairyman to increase profits."⁸⁰ Scientific subject matter covered by the dairy press ranged from: "SULPHADIAZINE FOR COCCIDIOSIS," to "DDT NOT RESPONSIBLE FOR VIRUS X DISEASE IN MAN OR BEAST." In 1950 the Jersey Bulletin reported that "Cortisone—a 'miracle' drug previously used for rheumatoid arthritis in humans—can be effective in curing ketosis in dairy cattle."⁸¹ The editor marvelled that there was no end to these wonders. In 1945 the Jersey Bulletin had mentioned penicillin as a cure for mastitis, but by 1950 it was observed that it was difficult and sometimes impossible to make cheese from the milk of penicillin-treated cows. On the whole, however, information on the new antibiotics was not extremely handled by the dairy journals.⁸²

Meanwhile the campaign against brucellosis, formerly called Bang's disease or contagious abortion, followed the pattern set earlier for tuberculosis. There were the same series of discoveries and the same proposed plans for eradication, except that vaccination was suggested as practical. And there was the same tendency to editorial obstruction of the campaign. In 1945 the Jersey Bulletin asserted that there were many sources other than cattle for undulant fever. In 1950 the same magazine rejoiced in announcing that the disease was on the decline. Meanwhile, brucellosis testing continued.⁸³

In the minds of the editors, the Korean War ranked next to the repeal of the oleomargarine tax as an important event. Editors generally restricted themselves to speculation of what the war would mean to the dairy industry, although some, like Jones, of the Pacific Dairy Review, offered a few general comments. In August he observed, rather petulantly: "At the moment it appears that this war may drag on for a long time. We will undoubtedly end up also fighting the Chinese communists, as they are all of the same breed and take orders from the same headquarters. The sad part of all this is that our fumbling foreign policy does not seem to be too serious as long as it remains in the political bickering stages, but when a shooting war finally starts the payoff comes in American boys' lives and millions of dollars from American taxpayers."⁸⁴ The editor had obviously been taken by surprise. Most editors, however, emphasized the importance of buying equipment before it was too late. In making this suggestion they assumed a long war. As Rabuffo of the Ice Cream Trade Journal noted:

Already, there is speculation among business men on the probable effects of the Korean situation and what might happen if it gets into a "war emergency stage."

The results of course, will be a stimulation of buying particularly durable goods—the items that were especially difficult to obtain during the last war. In fact, we already hear of manufacturers wondering whether they shouldn't have some extra equipment around so as to be ready for any eventuality.

At any rate, it will certainly help prod into buying action those ice cream executives who have been hesitant about investing in that new cup filling or packaging machine; the pasteurizer, homogenizer or cooler that their plant really requires for more efficient operation or the

freezer to replace the one that is in bad need of repair.⁸⁵

The American Butter and Cheese Review warned that even if equipment were available, it would probably rise in price and that "dairymen thinking of purchasing new equipment had better get it."⁸⁶

The editors also observed that the war in Korea altered the agricultural situation in the country. Food surplus had been turned into a food stockpile, and at the same time price supports for agricultural commodities were no longer necessary. As in 1898 and 1917 Hoard's Dairyman used the war as an opportunity to deliver a homily on dairying:

Certainly we take a very personal and vital view of encroaching war. The other, more impersonal view, involves the business of dairying.

Our advice, therefore, is the same we gave not too many months ago when we faced a period of possible price decline. That is to get our respective individual houses in order and make our dairy farm business as storm-proof as it is possible for us to make it. Regardless of war, peace, inflation, deflation, or other factors, the stubborn, undeniable fact remains that the efficient, well managed, productive dairy farm will provide its owner and his family with a comfortable and reasonable livelihood when the inefficient, indolent, and below-average are under stress.⁸⁷

This very nearly summed up editorial reaction to the war. By the end of 1950 the editors had written as much, and possibly more on the repeal of the oleomargarine tax than they had on the Korean War. Nevertheless, the editors were alert to the dangers of Communism, even though dairy problems struck nearer home.

Undoubtedly, the main preoccupation of the editors between 1941 and 1950 was the influence of government in the dairy industry. With one voice they demanded the end of bureaucratic intervention in economic affairs. They could not well make their demands heard during the war, but immediately after 1945 the editors insisted on a return to the principles and ideas of the twenties. Along with many other people, the editors sought an end of price controls. They grudgingly recommended price supports, but after the Brannan Plan came to the fore, editors denounced all supports. Nevertheless, many of them also disliked the hazards of the free market.

Conviction Lacking on Many Problems of the Industry

On the dairy questions of the period, such as the oleo-margarine tax, the increased use of other substitutes, artificial insemination, pen stabling, or even brucellosis, the editors exhibited an amazing lack of conviction. They seemed merely to report the news. No longer did prophets seek to control the destiny of the industry. The editorial mission seemed more than ever to consist in revising and printing handouts from government and business. Thus by 1950 the dairy press needed to gain new vigor and a new attitude toward the industry. The press had too often been meeting new challenges with old responses, but somehow the worn phrases did not meet the problems of the time.

Chapter 14 - Sketches of Typical or Unique Dairy Journals

Much of the information included in these sketches could not be conveniently added to the main body of this study. Where possible, brief biographies of several of the editors and publishers have been included in the sketches. The journals selected for inclusion in this chapter were chosen either because they were typical representatives of their class or because they were unique. This material may indicate some of the primary characteristics of various individual journals, and the periodicals themselves may illustrate general categories of dairy journals. All of those considered were long lived, had large circulations, and were presumably influential.

Altogether, nine periodicals will be considered: the Jersey Bulletin, Hoard's Dairyman, the Holstein-Friesian Register, Kimball's Dairy Farmer, the Holstein-Friesian World, the Creamery Journal, the Dairy Record, the Ice Cream Trade Journal, and the Butter, Cheese and Egg Journal. The three major categories of farmer, breeder, and processor journals are represented in these sketches.

Jersey Bulletin

On October 1, 1883, Dennis H. Jenkins began the Jersey Bulletin at Indianapolis. He was, at the time, just thirty-nine years old, having been born on June 27, 1844, on a farm in Brown County, Indiana. A few years later his parents moved to Ohio, but after the death of his father, the family returned to Indiana. At the age of nine, Jenkins left home to work as a farm hand, an occupation he continued until he reached the age of eighteen. He attended district school three months in the winter "a portion of the time." In 1862 he was employed as grocery clerk and assistant postmaster at Tuscola, Illinois. Toward the end of the Civil War he joined the thirty-fifth Illinois and after his discharge from armed service

went to work for the American Express Company as porter and later messenger.

While still employed by this company, Jenkins began the Jersey Bulletin. In August, 1884, when he felt that the Bulletin was prosperous enough to support him, he left the express company and with a total capital of \$350 started on an unhampered career of dairy journalist.¹ Although Jenkins sincerely advocated the use of Jersey cattle, apparently this was not his only reason for publishing the Jersey Bulletin. As a farm boy and later a traveler for the express company, he observed that purebred cattle were coming more and more into fashion and that, in the 1870's and 1880's particularly, Jerseys were playthings for the wealthy. Obviously, he concluded owners of Jerseys would be able, and perhaps willing, to support a special periodical. Furthermore, professional breeders might welcome an opportunity to advertise in a journal for breeders. As Jenkins admitted, the title of the Jersey Bulletin was similar to that of the defunct Monthly Bulletin of the American Jersey Cattle Club. The editor was undoubtedly willing to profit by any mistakes in identity which members of the American Jersey Cattle Club might make. Jenkins took only a slight chance of failure when he began the Bulletin, even though, as he admitted later, he knew practically nothing about Jersey cattle.²

The journal appeared semimonthly from 1883 to 1884, and weekly from 1885 to 1942. In July, 1942, it once again became a semimonthly and was still being published as such in 1950. Between 1885 and 1911 the subscription price for the Bulletin gradually declined from \$2.50 to \$1.00 a year but by 1919 rose to \$2.00, which continued as the standard rate through 1950.³ The average number of pages per issue increased from sixteen in 1883 to thirty-six in 1911 and seventy-two by 1950.

In 1906 Jenkins bought the Dairy World, and added the title to the Jersey Bulletin but the addition was dropped during the thirties. In March, 1911, R. H. Brown took over much of the work of running the paper; and in April, 1912, the editor announced the formation of a corporation which would publish the Jersey Bulletin. For all practical purposes, D. H. Jenkins severed relations with the journal he had owned and edited for twenty-nine years. He died in 1936 at the age of ninety-two.⁴

In its early issues the journal carried only around two full pages of advertisements, but by 1911 advertising had so increased that Jenkins felt called upon to defend his position

on the large porportion of advertisements. He explained that "it has been the aim to divide THE BULLETIN pages as equally as possible between news matter and advertising. In the majority of issues this is accomplished. At some seasons the advertisements encroach a little on reading space for a few weeks; but oftener there is more news than advertising."⁵

From the first, the Jersey Bulletin was intended for both breeders and dairy farmers. As Jenkins understood his journalistic mission, he was to reorient American dairying toward greater use of the Jersey cow and at the same time improve dairying techniques. Apparently his early efforts were satisfactory, for readers wrote in, expressing interest in the journal.⁶ Reader approval was mirrored in circulation figures. Subscriptions increased from 1,500 in 1886 to 7,500 in 1895, but then declined to 5,000 in 1897. By 1907, circulation had increased to 8,500 and consistently climbed until the 1920's, when it stabilized at around 14,000. During the depression of the thirties, circulation slumped to around 6,000 but by 1949 was once again above 12,000.⁷

Under Jenkins, the journal was intended to circulate widely, for as he observed in 1899: "THE JERSEY BULLETIN at \$1.50 per year should go to every home where a dairy cow is kept."⁸ In spite of a pronounced prophetic fervor which was evident in his writing, Jenkins always maintained that his paper was primarily a medium for the exchange of ideas. In 1892 he wrote: "It is not claimed that The Jersey Bulletin is a newspaper, but rather a medium, through which Jersey breeders can exchange opinions, 'swap' experiences. In The Jersey Bulletin is contained all the Jersey news, not as we see it, nor as some versatile writer may see it, but as it occurred."⁹

In his efforts to improve dairy practice, Jenkins was consistently influenced by his desire to promote the glory and greater use of Jersey cattle. He continually opposed the use of artificial butter color and protested that the Babcock test was not a fair butter test. These positions often brought the Jersey Bulletin into conflict with W. D. Hoard, of Hoard's Dairyman, and other editors. In answer to a question about artificial butter coloring, Jenkins revealed some of the motives for his opposition to its use. He wrote in 1899 that "butter from good Jersey cows, properly made, does not need artificial coloring to make it yellow. The cow colors it. A law prohibiting the use of butter color would not hurt the sale of good butter, but would make it necessary for

poor butter and oleomargarine to be sold for what they are. This would put competition on an honest basis—first class goods would not be compelled to fight a fraud, and each would sell on its merits.”¹⁰ Whatever the topic, Jenkins directed the discussion toward the virtues of Jersey cattle and his journal. In January, 1899, for example, Jenkins stated, apropos of a feud with Hoard: “Our remarks are all made in defense of the Jersey cow and THE JERSEY BULLETIN, and without malice. But now we read of another of Hoard’s correspondents, who purposely misrepresents our position on the Babcock, which he, like others, will not see. It does not require very ponderous reasoning to perceive why the Babcock is not fit to make a butter test.”¹¹ In announcing that his position was taken in defense of the Jersey cow, Jenkins admitted that he feared the Babcock test would in some way diminish the fame of Jersey cattle. His opposition to creameries, separators, and the tuberculin test apparently all stemmed from the same fear.

Toward the end of his editorship, Jenkins lost his vigor and sense of editorial balance. Articles increasingly centered on descriptions of herds and individual cattle. In 1910 the Third Assistant Postmaster General informed the Postmaster at Indianapolis:

Sir:—This Office is in receipt of a copy of a recent issue of “The Jersey Bulletin and Dairy World,” an examination of which indicates that the publication is “designed primarily for advertising purposes,” within the meaning of the Act of March 3d, 1879, its purpose being to promote the sale of stock advertised therein by devoting a large percentage of its text to “writeups” (textual advertising) of the stock advertised.

Please bring the matter to the publishers’ attention and inform them that, unless a decided change is made . . . in the character of the publication, no assurance can be given that a citation will not be issued them to show cause why the authorization for its admission to the second class of mail matter should not be revoked.¹²

Jenkins was outraged, but it might be assumed that the Postmaster had put his finger squarely on the facts.¹³

After Jenkins left the paper in 1911, R. H. Brown acted as editor for a short period, and then employed a series of editors, all of whom consistently proclaimed the virtues of the Jersey. The changes in editorial style, makeup, and features which occurred between 1912 and 1950 were similar

to changes in other periodicals and generally did not indicate editorial originality. Some exceptions will be noted. After 1911, the Jersey Bulletin continued to be a source of information for dairymen as well as breeders, but the former editorial enthusiasm largely disappeared. The Bulletin was no longer first on the spot with a contrary opinion as it often had been when Jenkins was editor. Articles and editorials moderately covered topics like: "Preventing Scours in Calves," "Seven-Day Test Losing its Grip," or "Secretaries Report for Bulletin Cup." In 1940, under the title "Editorializing," the editor noted: "Thus far the San Francisco Exposition hasn't laid a line of dairy publicity on our desk, but the Borden mixed herd exhibit and the Electrified Farm Jersey herd at the New York World's Fair are exceedingly well publicized...."¹⁴ The comments on the fairs were an indication of the change in attitude. In 1893, Jenkins had moved his office to Chicago to cover the Columbian Exposition; in 1940 the editor merely complained that there were not enough publicity releases.

Nevertheless, the paper did not entirely lose its position of leadership. The Jersey Bulletin was among the first of the journals to urge the promotion of special trade-marked milk, was the first of the breed journals to carry a youth page, and was one of the first to give wide publicity to the veterinary uses of penicillin. It was notably first in attacking retailer iniquities, or perhaps last in abandoning the fight against middlemen. In either case, its position was unique. Between 1910 and 1940, attacks on retailers were not common in dairy journals, but in 1917 the Jersey Bulletin had complained that distributors made excessive profits while farmers made hardly anything.¹⁵ In 1932 the Jersey Bulletin returned to the subject with a depression story.

Recently a jobless young man called on our home commissary department soliciting customers for a milk route he was attempting to establish. He must have twenty-five customers in order to begin delivering for the milk company in question, and he is to pay the company four cents per quart to retail at eight cents.

.....
We happen to know that here in Indiana the producer in countless instances gets about two cents per quart with all his labor and investment, whereas such route men have a four cent chance at profits with nothing but an expensive motor vehicle. Our criticism is not for the

young man. Our criticism is for any dealer who commands a six cent spread on two cent milk.¹⁶

For all its flaws, the Jersey Bulletin was one of the few journals to maintain a distinctive quality in its editorials. By 1950, the relative influence of the journal had declined from what it had been in the 1890's, but advanced years alone entitled it to respect.

Hoard's Dairyman

In 1885 William Dempster Hoard began publication of Hoard's Dairyman at Fort Atkinson, Wisconsin. This venture was an outgrowth of a regular dairy column which Hoard had begun in his Jefferson County Union in 1872. W. D. Hoard was born in Stockbridge, New York, on October 10, 1836. He worked on his father's farm and attended school in the winter. In 1857 he decided to move West and after some wandering settled in Dodge County, Wisconsin, where he managed to make a living as a singing teacher and farm laborer. At the start of the Civil War he enlisted in Company E of the Fourth Wisconsin Infantry and was discharged for sickness at New Orleans in 1862. He promptly re-enlisted and was finally discharged in 1865. He returned to Wisconsin where he sold nursery stock and grew hops. In 1870 he began the Jefferson County Union at Lake Mills and in 1873 moved his paper to Fort Atkinson. He noted that more and more Wisconsin farmers were turning to dairying, and that those who did so prospered. He decided to agitate for more intensive dairying in Wisconsin, and by 1885 there were apparently enough potential subscribers to keep a dairy paper going. Nevertheless, Hoard's Dairyman appeared as a supplement to the Jefferson County Union until 1889. In 1888 Hoard was elected governor of Wisconsin, but was defeated for re-election in 1890. He then turned his full attention to his several papers and to the dairy industry.¹⁷ He died in 1918 and was succeeded as editor by A. J. Glover. When Glover died in 1949, W. D. Knox took over as editor.¹⁸

From the first Hoard's Dairyman exerted influence on the farmers of Wisconsin and other states. In 1892, J. H. Monrad noted that the journal "... has all the time been looked upon as the dairy paper. In the last few years it has spread itself, and certainly may boast the largest circulation of any dairy paper." From an estimated net paid circulation in 1885 of 700, the paper increased to an estimated 66,500 in 1914. After 1915 the figures were determined under the

rules of the Audit Bureau of Circulation and climbed from 67,866 in 1915 to 332,459 in 1950. The journal was extensively quoted in other journals, which suggested considerable influence throughout the industry.¹⁹ The influence of Hoard's Dairyman may also be estimated by considering a few of the programs which the journal successfully supported. The list of achievements are considerable. The paper won popular support for its positions in favor of artificial coloring, oleomargarine legislation, single-purpose cattle, and the use of alfalfa and silos. These victories were won in consort with other papers. Hoard's Dairyman also inaugurated and successfully concluded the campaign against bovine tuberculosis. And this was done in the face of farmer resistance and, for the first decade, journalistic obstruction. The one significant defeat for Hoard's was the constant refusal of farmers to test their cattle to determine productivity of individual animals. Another defeat, indicative of the times, was the repeal of the oleomargarine tax in 1950. But by 1950, farmers were no longer a majority nor were their counsels often heeded by the Congress, especially when opposing pressure was brought to bear. Hoard defeated Jenkins on the questions of the use of artificial butter color and the Babcock test, but in both cases Jenkins had taken the potentially unpopular side. Hoard, however, was not adverse to opposing popular opinion when occasion demanded, and from the first he advocated the eradication of bovine tuberculosis, by slaughter if need be. Under Glover this campaign was continued, and after 1949 Knox carried on a program for the eradication of brucellosis which had been started by Glover.

There were, through the years, few changes in the make-up of the Dairyman. In the early twenties the journal began carrying the column "Hoard's Dairyman Juniors," and in 1926 when the journal changed to a semimonthly, Glover announced that "we shall give more attention to the family circle; the fireside; the good wife; the boys and girls; the fruit and flower garden; the home and whatever makes for its happiness and comfort."²⁰ The price of the journal was reduced to one dollar for three years and remained in effect in 1950. In the 1930's the journal carried columns on "The Dairy Farm Home" and "Recipes For Mother and Daughter."²¹

Like Jenkins, Hoard insisted that his paper was conducted by and for practical farmers. In July, 1892, he observed:

The great distinguishing feature of the Dairyman that

makes it so valuable to its readers is the close practical correspondence it receives. A wiser, more candid lot of farmers never wrote for any paper than those who favor the DAIRYMAN with the results of their experience. But we are hungry for more of the same sort.

There are thousands of the dairy farmers who read the paper who could tell a right valuable story if they only thought so. Friends we want you to try it. Sit down and in a plain, straightforward way tell us about your cows; how you are managing them; what you make them produce a year in pounds of milk, or if you choose in pounds of butter. Tell us about your barns, stables, how you handle your cows, and how your stables are constructed. We want the practical experience of men for record here in the DAIRYMAN.²²

Until late in the twenties the editors of Hoard's Dairyman depended on comments from readers for most of their material. From 1885 to around 1900 most dairy information came from farmers. After about 1900, when the work and publications of experiment stations increased significantly, the information contained in these bulletins was usually passed along as answers to questions sent in by correspondents. As late as 1915 almost all of the material in the journal was presented in the form of answers to questions. During the twenties the policy of the journal was gradually modified until by 1930 letters from readers were largely confined to two columns: "Grist from Our Mail" and "Opinions, Brickbats and Bouquets."²³ Because of the importance of correspondence in the makeup of Hoard's Dairyman, it was common for the editors of other journals to castigate correspondents of Hoard's as freely as they attacked the editor.

On the whole, Hoard paid more attention to the findings of scientists than did most other editors of his time. In fact, after 1890, Hoard's Dairyman carried a comparatively large amount of information taken from university and experiment station reports. Hoard accepted these contributions gratefully, if critically. In 1892 he remarked: "Some of these Bulletins are not as wisely and practically edited as we would wish. The facts are not marshalled in any logical order, and not infrequently the central informing truth is buried under heaps of rubbish. All the same we welcome every succeeding Bulletin because we never fail to find something instructive therein."²⁴ By 1901, however, Hoard

decided that the experiment station bulletins should be intelligible to someone other than editors. In a comment on silos, always one of his favorite topics, Hoard remarked:

The only objection we have to Drs. Babcock & Russell's new silo theory is that it takes so much language to describe it. Following is an example: "The intramolecular changes which occur in protoplasm, where ordinary metabolic processes are suspended by reason of oxygen exclusion, always result in the formation of organic acids, and a partial degradation of albuminoids." All of which is doubtless true. But it is no less true that, to a majority of the readers of the report, the above sentence is so much Greek, and in consequence of such sentences, they will pass over, without giving it the attention it deserves, what is probably the most valuable and painstaking investigation on ensilage that has ever been made.²⁵

One of the more valuable services rendered by Hoard was the interpretation of bulletins for farmers. This was only one of Hoard's contributions to dairy husbandry. He continually urged, cajoled and demanded that farmers build silos, grow alfalfa, and take proper care of their cattle. In 1898 he inquired: "What sort of man must he be who prefers to breed, feed, and keep a poor general purpose cow; who prefers to know nothing about what she is doing, and will not even test her in the rudest way, to know where he and she stand; who had rather sail along in blissful ignorance, than in profitable understanding of his business; who rejects anything and everything that will turn him from the error of his way? Sure enough, what sort of man is he? Yet there are thousands of him!"²⁶ From the very beginning of his journal Hoard complained of farmers who would not read and who consequently held up the progress of dairying.²⁷ He persistently attempted to reach those individuals.

Hoard died in 1918, but the policy of the journal remained largely unchanged. The only important innovation was the addition of a page entitled "Editorial Comments." Hoard had usually printed his editorials here and there throughout the paper; by 1921 all the editorials were gathered on one page.²⁸ In 1937 information from experiment station reports was printed, along with other farm advice, under the title, "Dairy Farm Flashes—Seasonal Notes—In Brief."²⁹ This change took place concurrently with the general trend of collecting reader opinion in columns. By 1937 Hoard's Dairyman depended primarily on articles by professional writers.

Throughout its existence the paper never wavered in its support of what the editors thought was right, and like the Jersey Bulletin, with which it quarreled for many years, Hoard's Dairyman was one of the few distinctive dairy journals. In terms of circulation, it was always one of the most influential.

Holstein-Friesian Register

The Holstein-Friesian Register was begun at Terre Haute, Indiana, in 1886 but was moved to Brattleboro, Vermont, in 1888. In that year Frederick Lowell Houghton became owner and editor. Houghton was born in Brookline, Massachusetts, on August 24, 1859. He spent most of his early life in Boston where he attended the public schools. Later he attended Boston University, received the degree of Bachelor of Law, and subsequently practiced law in Boston from 1884 to 1894. For a brief period between 1892 and 1893 he moved the Holstein-Friesian Register to Boston, but for most of the time after 1888 the journal was published in Brattleboro.³⁰ In 1894 Houghton became secretary of the Holstein-Friesian Association of America and continued in this position until his death on December 19, 1927.

The journal began as a semimonthly in 1886, became a monthly in 1896, and changed back to a semimonthly in 1903. In 1896 Houghton reduced the size of the magazine and appealed for more subscribers. The journal managed to live through the depression of the 1890's and by 1910 was apparently fairly prosperous. At least appeals for subscribers largely disappeared.³¹

Like all the breed journals, the Holstein-Friesian Register carried a large amount of advertising, but unlike the Jersey Bulletin, Houghton's enterprise ran little reading matter other than articles on breeders and herds, most of which could be classed as textual advertising. Before 1897 the Holstein-Friesian Register contained only the usual amounts of material copied from other periodicals. In 1896 the editor promised that "original contributions, regular correspondence and the best dairy news will be found in every issue . . ." ³² Nevertheless, by 1897 the paper was composed mostly of copied articles and so continued through the nineties.

Some time before 1917 Houghton engaged Valancy E. Fuller (former editor of the Jersey Advocate and Dairyman, published in 1901 and 1902) to prepare a column on feeds and feeding. Fuller announced that he would "... answer ... all questions on feeding dairy herds, not for tests, and we

seek inquiries from all our readers"³³ This was the only column of any note ever carried by the Register, and on the whole it contained most of the reading matter which did not specifically pertain to Holsteins. By 1917 Houghton had also acquired several assistant editors, but the mast-head continued to name him as chief editor.

The circulation of the journal was astounding, considering its rather limited appeal. The journal did not attempt, as did the Jersey Bulletin, to establish a reputation as a general dairy paper. In 1917 Houghton boasted: "In spite of advanced age and old fashioned principles and a few other handicaps (?) THE REGISTER continues to grow like a farmed youngster and it is about as difficult to supply its increasing demands for paper stock as it is to keep the aforementioned growing youngster in clothes of his size. Sixteen thousand, seven hundred copies of the March 1st issue were mailed from the office of publication which, we believe, comes pretty near to covering the Holstein field."³⁴ In December, 1927, Houghton died. His paper, which had always been a one-man affair, was sold to the Holstein-Friesian World in April, 1928. Thus the first periodical for Holstein breeders came to an end.³⁵

The Holstein-Friesian Register was one of the few papers intended for breeders, but more importantly, it set the pattern for other breed papers which followed. The Jersey Bulletin was not as typical of its class as was the Holstein-Friesian Register. From the first the paper was set in small type, generally around 4 or 6 point, and by 1910 this type was badly worn. This size and condition of type was usual for all the breed journals. And, even as late as 1910 the subject matter consisted of correspondence about Holstein cows, reports of contests and fairs, and the extended remarks of the several club leaders on various subjects. The journal was invariably composed primarily of advertisements. These characteristics were also common among other breed papers.

Until about the time of the First World War, the editor was chiefly interested in promoting the use of Holsteins by ridiculing the Jerseys. This approach was primarily defensive and seemed to derive from the disparaging remarks Jenkins habitually made of Holsteins. An example of counter-attacking by Houghton may be interesting:

The Jersey Bulletin which has long looked askance and commented sarcastically upon the demand for Holstein

milk for babies, allowing that anything was good enough for institutions, etc., provided there was plenty of it, now laughs loudly and triumphantly in proclamation of a report that two babies have been fed on Jersey milk and have lived. Well, what of it, friend? Is it, then, really worth while to produce milk upon which babies, invalids and the feeble minded thrive, and is the verdict which the medical world and the public generally have pronounced upon the milk of the Black-and-White breed a proud and honorable one? We think it is and commend your joy.³⁶

Outbursts of this sort became less frequent after Jenkins left the Bulletin in 1912. By 1917 anti-Jersey comments practically disappeared from the Register.³⁷ Houghton was much more inclined toward quiet propaganda than were most editors of journals for breeders. In 1917 he noted in a typical editorial: "The Register will take pleasure in presenting to each of its readers, with the next issue, a lithograph of the new champion butter producer of the world! Segis Fayne Johanna 50.68 lbs. This picture, of exceeding interest the world over, should be framed and preserved by all loyal lovers of the breed; to whom THE REGISTER extends congratulations upon this great achievement by one of our Black-and-White favorites."³⁸ Other typical articles of the twenties covered such subjects as "The Dehorning of Cattle—A Plea to Make This Practice Illegal in America," "Size of Dairy Cow Influences Production," and "Red and White Holsteins."³⁹

Hoard and Jenkins were prophets of dairying. In contrast, Houghton was a quiet businessman who sought to serve his readers without giving offense to anyone. He was especially interested in obtaining as much advertising as possible. With brief exceptions for briefer periods, this was true of most breed journals. The Holstein-Friesian Register was thus not only the second important breed paper, but was also the typical example of its class.

Kimball's Dairy Farmer

In 1890, Fred L. Kimball, son of a journalist, began the Creamery Journal at Waterloo, Iowa, and in 1903 decided that the farmers of Iowa could make larger profits if they would follow better dairy-farm practices. Kimball began his Dairy Farmer to carry information to the farmers of the West. Apparently Kimball believed that Hoard's Dairyman

was no serious competitive threat in Iowa, and the demise of the many local dairy papers of Kansas left that area open for circulation expansion. And Kimball did secure subscriptions in Kansas.⁴⁰ In 1904 Kimball's Dairy Farmer absorbed the Dairy and Creamery, of Chicago, and in 1910 the Dairy Gazette, of Lincoln, Nebraska.

Kimball died July 28, 1904. After his death the Dairy Farmer was operated by his estate and edited by E. R. Shoemaker. In 1922 the journal was purchased by E. T. Meredith, who moved it to Des Moines and changed the name to the Dairy Farmer.⁴¹ The periodical appeared semimonthly between 1903 and 1927 and as a monthly thereafter. The journal was edited by C. A. Goss from 1922 to 1927 and by E. M. Harmon from 1927 to 1929. In September, 1929, the Dairy Farmer was merged with Successful Farming because the dairy paper was taking too many advertising accounts from the general farm journal. Thus in 1929 the first and only real competitor of Hoard's Dairyman came to an end.⁴²

In 1903 the paper sold for one dollar a year, and by 1916 for twenty-five cents, and by 1922 at three years for one dollar or the same as Hoard's.⁴³ When Kimball began his publication he intended to present a primer in dairy husbandry for farmers of the West. He was particularly opposed to the use of dual-purpose cattle. Nevertheless, the most significant fact about Kimball's Dairy Farmer was that it began in competition with Hoard's Dairyman and affords an interesting comparison. Like Hoard, Kimball stressed the need for farm cleanliness, the use of single-purpose cattle, use of the silo, cow testing, and other programs of dairy-farm improvement. He also attacked the railroads quite frequently, asserting that they gave poor service and charged exorbitant rates. The editorial policies established by Kimball were followed by Shoemaker and his successors. But there were some differences. Kimball willingly squabbled with rival editors, but his early death prevented him from becoming embroiled with Hoard and others. Shoemaker was as conscientious as Kimball but was less pugnacious. An editorial chosen at random may prove interesting. In the Spring of 1906 Shoemaker wrote: "Work is increasing just now. I know that, but, bless you, you've no kick coming. The man who complains because he has too much to do better get another job. If your work is unprofitable, of course, you are overloaded, but if its yielding you good returns you can't get too much of it."⁴⁴ After 1904 the editors calmly requested farmers to follow good dairy-farm

practices. The journal carried advice on feeding and, of course, steadfastly opposed the manufacture and sale of oleomargarine. Except for an unusual interest in farm electrification, the Dairy Farmer of the twenties followed rather than led in the various campaigns proposed by the dairy journals. Coverage of material was adequate but uninspired.⁴⁵ Nevertheless, circulation figures suggest that the journal had wide influence.

Holstein-Friesian World

In January, 1904, Charles G. Brown and E. M. Hastings started the Holstein-Friesian World at Ithaca, New York. Shortly afterward Hastings left the partnership, and in 1912 Brown began an alternating western edition published at Madison, Wisconsin, and edited by his son Ira. Both editions went to the same subscribers. In 1914 E. M. Hastings and Maurice S. Prescott bought half interest in the journal and took over editing the eastern edition. C. G. Brown joined his son Ira in Madison where they edited the western edition. In 1915 the partners sold the journal to the Stevens brothers of Liverpool, New York, who hired F. T. Price and H. E. Colby as editors of the eastern and western editions respectively. In 1916, Hastings and Prescott entered into competition with a new journal entitled the Black and White Record. In 1918 the Holstein-Friesian World merged with its competitor, and Prescott was retained as editor. He still held the post in 1950. The western office was promptly closed, and the journal published at Lacona, New York. In 1928 the World absorbed the Holstein-Friesian Register, and in 1929 the Stevens brothers sold the journal to Price and Prescott. Price died in 1932, and Prescott became sole owner and editor of the enterprise.

The journal began as a semimonthly, changed to a weekly in 1912, to a biweekly in 1932, and back to a semimonthly in 1943. From the first the journal carried a large amount of advertising and, prior to 1912, also contained general literary articles. In 1914 the editor boasted of having increased the average number of pages from sixteen to forty-eight. Most of the increase was advertising. On October 9, 1920, out of 148 pages of printed matter, 67 per cent was in advertisements, only 33 per cent in textual material. And only by a most liberal interpretation could the nonadvertising matter be considered reading material, since it was almost wholly a form of free advertising for breeders. By 1920, advertising had so increased that textual material was per-

force set in very small type and was often nearly illegible.⁴⁶ Improvement in type was not noticeable until after 1944.

The journal is significant primarily for the early attempts of Charles G. Brown to produce a paper for breeders which was something more than a medium for advertisements. He attempted to edit a literary magazine and as late as 1907 was quite active in the effort. His arguments against simplified spelling illustrate his general editorial approach.

Language is a growth, an evolutionary development, and change is constant and necessary. Dictionaries are useful in that they point out the best present usage and form of words. They never lead, but always follow accepted usage; they never suggest changes, merely noting those that occur. Therefore, such expressions as "the tyranny of the dictionary," which we frequently hear is a misconception of the facts.

This so-called "simplified spelling" reform is revolutionary in its tendency. It tends to destroy the beauty and symmetry of uniformity; it tends to cause a disregard for all literary standards; and it was unnecessary, as all really desirable changes would have inevitably occurred; but in the natural way, and without the evils attending the sudden and arbitrary overturning of accepted standards.⁴⁷

And of all the editors who attacked oleomargarine, Brown was one of the few who quoted the Bible. In 1907 he observed: "Deuteronomy 14:21.—'Thou shalt not eat anything that dieth of itself; thou shalt give it unto the stranger that is in they gates, that he may eat; or thou mayest sell it unto an alien.' —Packing House gospel."⁴⁸ Brown also carried a large number of stories, essays, and poems which were not directly connected with dairying or Holstein cattle. After 1912, the journal followed the standards set by the Holstein-Friesian Register, and devoted most of its space to news about breeders, herds, and exceptional cattle. The magazine may have helped spread the use of Holstein cattle, but otherwise its influence on dairy developments would appear slight. Nevertheless, the origin of the Holstein-Friesian World as a breed journal with literary qualities made it unique.

Creamery Journal

In February, 1890, Fred L. Kimball began the Creamery Journal at Waterloo, Iowa. The Journal appeared monthly, cost one dollar a year and ran about sixteen pages each

issue, of which about half were devoted to advertising. Until December, 1892, the paper was edited and printed in rooms over the elder Kimball's newspaper office in Waterloo. By 1894 the journal contained forty-four pages, of which from eighteen to twenty were advertising. As J. H. Monrad remarked: "Advertisers patronized it from the start. . . ." ⁴⁹ Kimball asserted that he did not accept advertising from all sources without discrimination, for as he explained in 1896: "We again wish to call the attention of our readers to the fact that under no circumstances do we print advertisements of firms whom we do not know to be responsible and trustworthy. In these times of shark merchants operating in all the cities, a paper like THE CREAMERY JOURNAL is almost a necessity to the shippers of creamery butter, as it is a directory of reputable firms doing business." ⁵⁰

Circulation, generally a fair indicator of both prosperity and influence, climbed from 5,800 in 1895 to 8,250 in 1900. By 1903 this had increased to 10,280. In 1904 Kimball died, and the magazine was taken over and managed by his estate. E. R. Shoemaker acted as editor from 1904 to 1915, when an editorial board apparently took over direction of the paper. In 1909 the journal changed to a semimonthly, and on May 1, 1916 the Kimball estate sold the Creamery Journal to the Buttermakers' Publishing Company. The new owners hired W. A. Gordon as editor. By the time Gordon took over, circulation had already slumped to around 5,000 and it remained near that figure until 1922. In 1922 Gordon left to assume the position of editor of the Dairy Record, of St. Paul, and was succeeded on the Creamery Journal by Burr Willits. From 1937 to 1950, circulation hovered within several hundred of 3,500. In 1932 the journal appeared as a monthly and in 1950 was consolidated with the Dairy Record, of St. Paul. ⁵¹

The Creamery Journal not only offered information on buttermaking and marketing but also carried a large number of columns such as "Among the Creameries," which gave the names and addresses of creameries and listed prices paid for cream and amounts received for butter by several creameries. The column "Jottings From Dairymen's Conventions" carried notes on various meetings. Under Kimball and his successors the journal opposed the manufacture and sale of oleomargarine, filled cheese, and other products which substituted vegetable oils for butterfat. Kimball was also especially critical of the railroads. In addition to these programs, the journal presented technical information, and

originated the idea of giving full reports on the social and economic affairs of creamerymen in various sections of the country.

Kimball made few other original contributions to dairy journalism, but he was at least competent and was not loath to give his opinion on any subject. Like all editors of the time, he was adept at throwing short jabs at fellow journalists. In a column entitled "Fired at Random," he wrote for example: "Monrad has written a very interesting book on 'Cheese Making in Switzerland.' Those who contemplate starting cheese factories in Switzerland should send for the work at once."⁵² Editorials became more subdued between 1904 and 1929. In 1909 Shoemaker reinstituted a column which had been started in 1898 and then discontinued. The second venture was less outspoken than the first. It was meant to be, for as the editor announced: "We call attention to the matter in this issue headed 'Facts and Foam.' This is the debut of a department which we feel sure will create a good deal of interest. The author is one of wide experience, and whose style we believe will be well received by Creamery Journal readers. If he should hit the tender place in your disposition, do not feel offended, as no personal reference will be made at any time."⁵³ The personal attack had been discarded, but biting comment on the foibles of creamerymen was still considered effective journalism. Apparent editorial ignorance of the history and policies of the Creamery Journal was evident in the presentation of an old column as new. Furthermore, the editor frequently asserted that his paper had been the first devoted to the interests of creamerymen, although the American Creamery antedated the Creamery Journal by two years.⁵⁴

After 1904 the journal continued to protest high freight rates, note conventions of dairymen, and report fairs and contests. In the twenties, Willits joined his fellow journalists in suggesting better promotion of dairy products. These requests continued through 1950. In the early thirties, the Creamery Journal vigorously proposed that the Philippines be freed so that American dairymen would not have to compete with duty-free cocoanut oil.⁵⁵

On the whole, the editors of the Creamery Journal made few original contributions in the area of dairy journalism, but the paper did supply butter makers with useful information and ideas. Its long life and large circulation suggested wide influence. Furthermore, until 1950 the journal successfully survived all competition; by 1943 it was the oldest of

the three national creamery papers in the United States. During the sixty years of its existence the journal was undoubtedly responsible for many improvements in the operation of creameries.

Dairy Record

In December, 1903, the owner of the Dairy Reporter (founded in 1900) offered to sell his journal to the Minnesota Butter and Cheese Makers' Association. The Association accepted the offer but apparently put neither time nor money into the venture until late 1904. Until then the journal was issued by Edward K. Slater with the help of a few enthusiasts under the title of the Dairy Record. Late in 1904 the Dairy Record Publishing Company was formed with Slater holding half the stock and the Minnesota Association the remainder. Slater gave his share to the Association when he became dairy and food commissioner for Minnesota in 1904. H. P. Olsen (later publisher of the Butter, Cheese and Egg Journal) assumed nominal editorship of the Dairy Record in 1905, but Slater continued to edit the journal until 1906 when Henry Sandholt took over as editor. Sandholt continued in that position until July, 1922, when he was replaced by W. A. Gordon. Henry Sandholt was a forceful editor of the school of personal journalism. In 1922 Gordon promised to continue the policies begun under the former editor and in large measure did so. In 1950, the Dairy Record, as edited by Gordon, was perhaps the only journal which still retained the outspoken and crusading spirit of the nineteenth century dairy journals.

At the time he became editor, Gordon had unusual background and experience for the position. Around 1900 he had entered the newspaper field and among other activities did some writing for various magazines. In 1912 he decided to be a dairy journalist and in preparation for this career entered the dairy school at Iowa State College. He graduated in 1916 and in the same year took over as editor of the Creamery Journal of Waterloo, Iowa.⁵⁶ His apprenticeship complete, he went to the Dairy Record in 1922 and was still editing the journal in 1950.

The circulation of the Dairy Record compared favorably with other technical papers, none of which ever achieved the subscription lists of the farm or breed journals. In 1907 the paper claimed 4,652 subscribers; this figure declined to 3,500 by 1912 and hovered around that number until 1931, when it dropped to 2,450. By 1937 circulation was up to

3,756 and continued to range between that figure and 3,000 until 1949, when subscriptions increased to 4,145. In 1939 the U.S. Census listed 3,506 establishments manufacturing creamery butter in the United States. Circulation figures near the 3,000 mark therefore suggest that the journal was reaching most of its potential subscribers.⁵⁷

Before 1922 the journal carried advice on butter and cheese making, with special emphasis on the management of coöperative creameries and cheese factories. Sandholt was particularly critical of centralizers, but by the time Gordon became editor the centralizer had almost ceased to be mentioned in the dairy press.⁵⁸ The journal was owned by the cheese and butter makers of Minnesota. The coöperative nature of the effort imposed limitations which both Sandholt and Gordon recognized. In 1912 Sandholt explained:

The Dairy Record is owned and published by the butter and cheese makers of Minnesota. We endeavor to represent and serve them, as well as the makers of other states, to the best of our ability. If there is something about the paper you do not like or would want changed, let us hear from you, in person or by letter. We all know the patron with the grudge or axe to grind, who runs around kicking and insinuating, but never shows his face at the creamery. He is not a good co-operator. The Dairy Record is a co-operative undertaking, hence is at all times exposed to the same dangers from within as the creamery. Happily, the Minnesota boys, individually and as a body, are endowed with a lot of common sense, or this paper would not be in existence today.⁵⁹

As in other dairy journals, editorial material and emphasis changed between 1904 and 1950. Editors gradually gave less space to technology and more to marketing and promotion advice. The Dairy Record differed from most periodicals, however, in that the editors retained an outspoken and sometimes crusading zeal for the improvement of the dairy industry.⁶⁰ The editors of the journal consistently supported campaigns against dishonesty in the dairy trade, opposed the use of adulterants, objected to creameries picking up milk from the farms, demanded that creameries buy according to quality, and after the 1920's, opposed government price supports for farmers. (Price supports for processors and manufacturers were sometimes advocated.)

The several editorial campaigns often enlivened the

journal and possibly contributed to its long life. In August, 1950, the Dairy Record was the oldest of the two papers of national circulation intended for butter and cheese processors. And this long, successful life was no insignificant accomplishment. In May, 1950, Gordon reflected on the achievement:

This issue marks the start of the second half-century of Dairy Record's existence....

We hope that we may be forgiven a pardonable feeling of pride in the fact that Dairy Record has never failed to publish a weekly issue in all those 50 years and that today it bears the same name with which it started and is the only dairy trade paper of national scope which has continued as a weekly.

A quarter century ago it was one of four weekly dairy trade papers. Two of them long since were converted into monthly publications and the other ceased publication several years ago. Here in our own state a paper whose publishers boasted that they would make the going tough for Dairy Record changed from a semi-monthly to a monthly and then closed its doors. A few years ago a national dairy business paper published at Chicago, which frankly adopted as its goal the replacement of Dairy Record as the industry's major source of news, evidently felt that the competition was too severe for it, too, has ceased to exist. Two other monthlies long since gave up the ghost and one more will cease to be published next month.

There have been many hard days, and the fact that Dairy Record has continued as a weekly throughout its long history is due not only to its own efforts to keep abreast of the times, but to the loyalty and friendship of its readers and advertisers.⁶¹

The Dairy Record was important not only because of its wide circulation and its influence on butter and cheese makers but also because it provided training for editors and publishers. Both H. P. Olsen and E. K. Slater, publisher and editor respectively of the National Butter and Cheese Journal, had at one time worked on the Dairy Record.

Ice Cream Trade Journal

In January, 1905, Thomas D. Cutler and Edward C. Williams began the Ice Cream Trade Journal at New York.

The senior partner, Thomas D. Cutler, was born in Comanche, Iowa, October 3, 1870. He attended the local school, "the fourth room of which was at the high-school level." In 1889 he entered the field of trade journalism as office boy for the publishers of the Stationary Engineer and the Master Steam Fitter. Around 1892 he was hired as editor of the International Confectioner and held that position until he entered business for himself.⁶² In 1900 Cutler met Edward C. Williams, who was a salesman for dairy and ice cream equipment and who also had some experience in advertising. In 1904 Cutler decided to begin the Ice Cream Trade Journal and was joined by Williams, who handled some technical articles and apparently used his contacts as salesman to secure advertising. In 1913 Cutler bought out Williams and continued as editor until 1924 and as publisher until 1937. In 1913 Cutler also began the Milk Plant Monthly, but shortly sold the journal to Henry Heinemann. And in July, 1937, Cutler sold the Ice Cream Trade Journal to the Reuben H. Donnelley Corporation.⁶³

After Cutler retired in 1937, Harry W. Huey continued as editor, a position he had held since 1929. In 1938 Malcolm Parks became associate editor, and in 1939 editor, but he was promptly replaced by Frank Black, who had been the business manager. The Reuben H. Donnelley Corporation continued to have trouble finding an editor. In October, 1939, B. I. Masurovsky became editor, and Black again became business manager. Both Parks and Masurovsky had had experience in the ice cream industry, but neither had any editorial training or experience.⁶⁴ In November, 1939, Vincent M. Rabuffo was hired as editor and still holds that position. Rabuffo had had no connection with the ice cream industry prior to his appointment in 1939, but he had been a writer on the New York Evening Mail, the New York Daily News, and the Brooklyn Eagle. He had also been editor of several publications in the food industry before 1939.⁶⁵

Until 1937 the makeup of the Ice Cream Trade Journal was unique among dairy journals. Cutler clearly separated advertising from textual matter. All advertising copy was divided about equally, half put in the front pages of the journal, and half in the back. Articles ran consecutively without interruption. This practice was different from that of all other editors and was continued until Cutler sold the journal. In 1912, a representative year, the paper reported on manufacturers' conventions, noted the cream prospects of dairy regions, anticipated the effects of expected state or federal

health regulations, and offered advice on such technical details as making marble ice cream. From 1905 to 1937 Cutler consistently opposed what he called "profits by legislation" and was unrelenting in his attacks on farmers and others who sought government assistance in maintaining prices. In 1917 he wrote:

Recently enterprising auto tire manufacturers have placed on the market a shoe sole said to be more durable than leather. Now let the live stock producers immediately bombard congress with a "vehement protest," against this invasion of their personal liberties. "An industry which is the very foundation stone of the republic is threatened. Are these vultures to be permitted by congress to carry on a nefarious business which is encroaching upon the exclusive field of the leather interests? Are Congressmen to stand complacently aloof while these harpies in human form are permitted to tear the flesh of their victims?" ⁶⁶

Between 1912 and 1937 the circulation of the Ice Cream Trade Journal hovered around 2,200, although subscriptions fell below 2,000 between 1915 and 1922. By 1939 circulation had increased to 3,958 and by 1949 rose to 6,700. From the first the journal carried a large proportion of advertising, and by 1921 fully 70 per cent of the magazine was devoted to advertisements. The separation of textual and advertising matter kept the journal from appearing to be overwhelmed with advertising. In common with other journals, the Ice Cream Trade Journal emphasized selling promotion during and after the 1920's. The emphasis did not always have the desired effect. By 1933, for example, only 48 per cent of the journal was in advertising.⁶⁷

Between 1933 and 1938 the various editors of the journal complained of cutthroat competition in the industry and especially denounced the specialized ice cream store. After 1939 special editorial campaigns included advice that manufacturers' pool ice cream cabinets during the war and that members of the industry attempt to enter the frozen food business.⁶⁸

The chief significance of the Ice Cream Trade Journal lay in the fact that it was the first magazine devoted exclusively to this segment of the dairy industry. It was also unique in its early policy of separation of advertisements from textual matter. The history of the journal also seemed to suggest that editors need not have technical knowledge in

SKETCHES OF DAIRY JOURNALS

e phase of the dairy industry in order to be successful. Presently, an individual with editorial experience could transfer his knowledge to the editing of a dairy periodical; an individual with technical dairy training could seldom transfer his knowledge to editing.⁶⁹

er, Cheese and Egg Journal

January, 1910, Hans Peter Olsen began the Butter, Cheese and Egg Journal at Milwaukee, Wisconsin. Olsen was born in Denmark, July 30, 1869, arrived in the United States in 1891, migrated to Minnesota, worked on dairy farms, and after 1897 held positions as a creamery operator in several plants. In 1904 he took over the business management of the Dairy Record but apparently did no great amount of editorial work. In 1910 he left the Dairy Record and began the Butter, Cheese and Egg Journal. Olsen died February 7, 1949.⁷⁰

February, 1910, Olsen had his paper accepted as the official organ of the Wisconsin Buttermakers' Association. Its official sanction apparently increased circulation; the publisher thanked the association members for their support. By 1912 the journal had 3,000 subscribers; by 1915 it increased to 5,000; and then they fell to 4,100 by 1919. From 1920 to 1930 circulation ranged around 4,000, and in the 1940's it hovered near 4,500. These figures compared favorably with those of other periodicals of its type. The subscription price began at one dollar a year, decreased during the thirties, but by 1949 was once again one dollar.⁷¹

In 1928 the word "Egg" was dropped from the title, and in 1930 the journal appeared as three magazines: the National Cheese Journal, the National Butter Journal, and Concentrated Milk Industries. In 1932 these three were reorganized into one paper, the National Butter and Cheese Journal, which was published semimonthly. In 1950 the title changed to the Butter, Cheese and Milk Products Journal, which by this time was published monthly.⁷²

Several editors held office under Olsen between 1910 and 1907.⁷³ In 1920, E. K. Slater became editor, and he retained the position until his death in 1954. Slater was born June 1877, in a log cabin near Northwood, Iowa. His family later moved to Fairmont, Minnesota. While a student in high school he wrote items for the local paper and later became a typesetter and then reporter for this same paper. He served as a lieutenant in the Spanish-American War, and after his discharge he went to work for his brother, who was a butter

maker. In 1899 he attended the dairy school at the University of Minnesota and was retained as an instructor. In 1903 he was appointed state creamery inspector and in 1905 became dairy and food commissioner for Minnesota. For two years, 1909-10, he served as assistant professor in the dairy division of the University of Minnesota. Shortly thereafter he became secretary of the National Dairy Union and lobbied in Congress against the oleomargarine manufacturers. In 1910 he became editor of the Blue Valley Bulletin, which was one of the earliest creamery house organs. In 1920 he joined the staff of the Olsen Publishing Company.⁷⁴

Until the early 1930's the Butter and Cheese Journal devoted most of its space to advice on creamery practice, and carried items on various creameries and cheese factories. Typical articles included such titles as: "Variations in Cream Tests. By Prof. C. H. Eckles . . .," "Motor Truck for Quick Delivery," "Moldy Butter and Its Prevention," "Spring Openings Among Cheese Factories," "The Money Cost of Tuberculosis," and "Latest Quotations from Leading Markets."⁷⁵ During the thirties and forties the journal carried a large number of articles on selling and advertising, as was true of most periodicals of the period.⁷⁶

In 1950 the journal was one of the two national creamery papers in existence. Mere survival entitled it to some respect. In addition, it was one of the several journals published by the Olsen Publishing Company and was a fair representative of this group. Seldom did the editors of the journal exhibit any crusading spirit, and the paper itself was notable for the large amount of advertising it carried.

The Olsen publications were significant in themselves, since they were representative of that trend toward the building of journalistic empires which was evident in both dairy and general journalism. The Butter, Cheese and Egg Journal was the first of a series of papers which included the Milk Dealer, begun in 1911, and the Ice Cream Review, begun in 1917. At one time Olsen published five separate journals, although for most of the time after 1917, he had only three running simultaneously. Although the circulation for any one of these periodicals was not unusually large, in the aggregate the influence of the Olsen Publishing Company must have been considerable. The nature of this influence can be judged from the expressions of the various editors, all of whom wrote rather moderate editorials suggesting that if members of the industry would act like gentlemen, all would be well.⁷⁷ In their day, Hoard and Jenkins had often been more outspoken.

Chapter 15 - Conclusions

Dairy Journalism Developed with the Country

The growth of dairy journalism both reflected and was part of the development of America in the nineteenth and twentieth centuries. The period was characterized by an astonishing increase in population, by constant and generally rapid land settlement, and, until the twentieth century, by a steady increase in the number of farms. These developments were accompanied by an increased amount of specialization in all fields. A greater number of different products were manufactured in factories. Within the factories greater division of labor took place. And in agriculture, general farming gave way to specialization in one or more crops.

In industry and agriculture greater use of machinery resulted in increased productivity per man—a change which both depended on and encouraged specialization. At the same time, the percentage of individuals engaged in any specialized activity increased in relation to the total population. Proportionately more farmers concentrated on dairy farming, and more individuals became involved in processing and distributing agricultural products.

While these developments were taking place, and partly as a result of them, a large, fairly complex, and constantly changing body of scientific and technical information accumulated in almost all fields. Dairy journals encouraged, reflected, and benefited from all these changes.

Literacy Increased throughout the Nation

Concurrently an increase in literacy took place in nineteenth- and twentieth-century America. This change accompanied those general movements toward social equality and political democracy which characterized the development of America. The pursuit of knowledge was no longer primarily restricted to a few aristocrats or intellectuals but

tended to embrace the whole population. The Lyceum movement, the demand for agricultural colleges, the appearance and success of magazines like Popular Science Monthly were manifestations of this trend toward more widespread learning. As early as 1820 enough farmers had become interested in learning to make agricultural journals possible.

The appearance of dairy journals in the 1860's and 1870's, therefore, suggested that during these years dairying had become a specialty in which a significant number of individuals were engaged, that a considerable volume of information on dairying had accumulated, and that members of the industry were willing and able to learn more about their specialty. And as separate journals appeared for groups and individuals interested in various nondairying subspecialties, so journals were also begun for men with particular interests in the dairy industry. Just as general scientific journals evolved into journals devoted to chemistry, biology, and physics, so dairy journals came to concentrate on farming, processing, and distributing. The history of dairy journalism thus epitomizes that history of specialization and technical advance which is characteristic of American development.

More specifically, the history of dairy journalism is part of, and a capsule summary of, the development of general and specialized journalism. Thus the personal journalism of Bennett, of the New York Herald, and Greeley, of the New York Tribune, had its counterparts in the personal journalism of men like Jenkins, Hoard, and Thompson. As the general periodicals developed into big businesses with managerial editors, dairy journals came to be edited by men like Slater and Myrick. The Hearst and Scrips-Howard empires had their counterparts in the small kingdom of the Urner-Barry Corporation and the Olsen Publications.

Dairy Journalists Generally Concentrated on Dissemination of Information

On the whole, both editors and readers agreed that the function of the various specialized journals was to report the latest ideas and methods in their several fields. Readers told journalists and journalists told one another to stick to their business and not engage in political discussions nor belabor their readers with irrelevant campaigns. As a rule, therefore, dairy journalists, like journalists in other specialized fields, concentrated on the dissemination of information.

This information originated in many places, and the chief task of the dairy journalist was to assemble, translate, and give wide currency to new ideas and techniques. Experiments conducted by private individuals, by state or federal agencies, by business, and by colleges were often of little immediate value. Generally, the journalists had to translate the results of experiments into advice for practical dairying. Scientific discoveries on the cause and nature of brucellosis, for example, were translated into advice that infected cattle be segregated and diseased herds be slaughtered. Thus the dairy journals became instruments for continual advances in the industry.

In presenting information, the dairy journals unavoidably became mirrors of the industry. In their columns they showed the problems which members of the industry considered important and how these were met at various periods. Certainly there was no group of men so responsive to pressure as editors; probably no group which so accurately identified the problems commonly accepted as important. In certain instances the dairy journals may have considered problems which readers considered irrelevant, but in the long run, reader opinion tended to shape the outlines of editorial policy. When farmers wrote editors asking for fewer scientific papers and more information from practical dairymen, editors obliged by briefly summarizing technical reports and carrying a large amount of correspondence from farmers.

Editors Followed Closely What Was Guessed to Be Reader Interest

Roughly before 1910, most of the articles carried by the journals centered on technology and method. Later the main problems considered by the journalists concerned the marketing and promotion of dairy products. And after about 1920 the editors devoted a large amount of space to the influence of the government on the dairy industry. The relative lack of editorial interest in many significant ideas, such as the theory of evolution, suggests that readers were little interested in these subjects. Or, if they were, they did not rely on the dairy journals for information.

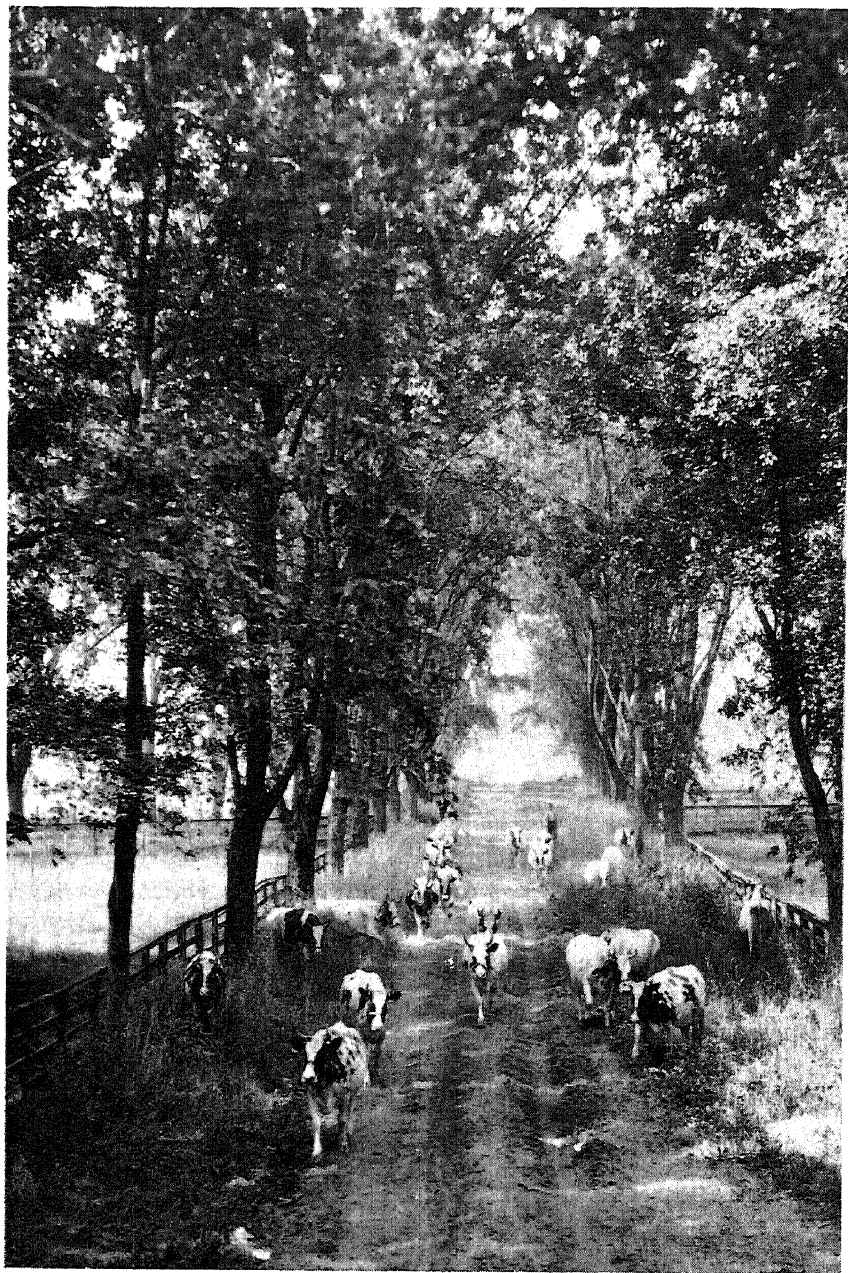
But the dairy journals did more than reflect the ideas of farmers and small business men. Editors attempted to create interest in various subjects, and they often sought to direct the course of American dairying. They also created in the sense that they tried to impose some order on the

industry; to achieve unanimity on ethical problems and to agree on certain technical procedures. Thus editors sought to promote better farming, encourage cheaper processing of dairy products, and create greater concern for public health. During the 1930's and 1940's editors searched for ways to accommodate the industry to the actions of a managed economy. The journalists undertook these tasks not only by spreading information but by continual editorial campaigns and crusades.

How to Measure Influence of Dairy Press

The direct influence of the dairy journalists is difficult to determine. Often many other forces were working toward the ends sought by the editors. Thus in the 1890's the various papers vigorously advocated pasteurization, but without much immediate result. Only under pressure from legislative bodies, boards of health, and creamery inspectors did operators gradually come to pasteurize milk and cream. The influence of the dairy journals on these public officials is not clear, but the dairy editors usually credited the urban daily papers with moving officials to action. Nevertheless, whatever other influences were at work, the dairy editors did achieve a high proportion of their goals. Farmers and processors used sanitary methods in handling milk, dairy farmers were persuaded to use specialized milk-producing cattle, silos were used by more farmers, creamerymen and cheese makers bought milk according to the Babcock test, and the industry began to advertise its products. Editors would justifiably point to a long list of campaigns which had influenced changes in the industry. And the changes the editors helped bring about were often quite far-reaching in their influence on American history. The widespread use of silos, for example, contributed to the vastly increased productivity of dairy farms. This increased productivity was then partly responsible for other changes, including an increased supply of dairy foods.

The rise of dairy journalism thus reflects, partakes of, and epitomizes that specialization which took place in both the dairy industry and in all other areas of American life. In their roles of translators, reformers, publicists, and crusaders, the dairy editors played significant parts on the American scene.



The cow is the foster mother of the human race. From the days of the ancient Hindu to this time the thoughts of men have turned to this kindly and beneficent creature as one of the chief sustaining forces of human life.

—W. D. Hoard

Photograph by Strohmeyer and Carpenter, White Plains, N.Y.

Reference Matter

Appendix

A: New Dairy Journals, 1911-1918

The journals which appeared between 1911 and 1918 offer no startling differences from those begun earlier. There were the usual assortment of technical, trade, and local journals, all of which had counterparts in this or earlier periods. The one possible exception was the scientific Journal of Dairy Science. The following is a chronological list of the nineteen periodicals founded between 1911 and 1918.

Milk Dealer, begun at Milwaukee, October 1, 1911, published monthly throughout its life, began as the International Milk Dealer, and edited successively by John Michels (1911-12), R. G. Jones (1912-13), B. B. White (1913-18), J. G. Moore (1918-20), E. K. Slater (1921-51). The aim of the publication was to "Provide trade publication for the fluid milk industry..." Data from Questionnaire sent out in 1953 by Professor A. W. Hopkins, hereafter referred to as simply "Questionnaire." These questionnaires, as well as related correspondence are on file with the Wisconsin State Historical Society, Madison, Wisconsin. See also, Union List of Serials.

Angora Journal, published monthly at Portland, Oregon, by one Mr. Gage, "was discontinued many years ago," probably around 1922. Letter from E. F. O'Meara, ed. Home, Farm and Garden Magazine to Prof. A. W. Hopkins, dated April 15, 1953. See also Questionnaire, returned by Pacific Wool Growers. Appeared for a time as Angora Journal and Milch Goat Bulletin; see Union List.

Milk Plant Monthly, founded at New York, N.Y., in 1912, moved to Chicago, and then to Kansas City, Missouri. Successive editors: E. F. Heinemann, (1912-45), E. F. Cooke, (1945-46), David S. Lasser, (1946-53). Aim of publication: "Serve milk industry, and promote technical progress in the processing of milk products." Questionnaire and Union List.

Dairyman's Journal, begun at Marine, Ill., March, 1912, moved to East St. Louis, Ill., in 1920, and published monthly. Successive editors: G. E. Popkess (1920-46), G. E. Popkess, Jr. (1946-53). Aim of publication: "To further coöperative marketing of milk in midwest." For a time was called Popkess' Dairyman's Journal; see Union List. Also Questionnaire, filled out by G. E. Popkess, postmarked April 23, 1953.

Milk Magazine, begun at Waterloo, Iowa, February, 1913; ceased

publication September, 1924, when it was merged into Dairy Products Merchandising. See Union List.

Stock and Dairy Farmer, established as a monthly at Duluth, Minn., in 1913. Successive editors: Mr. Hutchins, Myron Bunnell, Mr. Williams, W. McGenty, H. W. Silfverston (1941-51). Object of the journal: To serve the dairy farmers in the cut-over regions of Minnesota, Wisconsin, and Michigan. Intended to promote the interests of livestock, dairy farming, and general agriculture. Cf. date of origin with that given in Union List. Data from letter from H. W. Silfverston to A. W. Hopkins, dated November 1, 1951.

Western Confectioner-Ice Cream News, founded at Los Angeles, in 1914; ceased publication in May, 1931. Was a monthly. See Union List.

Farm and Dairy, founded as a monthly at Salem, Ohio, October, 1914; became a weekly in 1918; changed to monthly in 1939. Founded by R. B. Thompson; sold to one Mr. Fox in 1925; owned by J. T. Darling in 1938. Goal of the paper: "To unite the agricultural interests in one publication and to thus serve them better." Intended for the farmers of Eastern Ohio, Western Pennsylvania, and Western West Virginia. Source: letter from J. T. Darling, pub. to A. W. Hopkins, no date. Also Local Rate Card, dated May 22, 1947.

Ayrshire Digest, begun at Brandon, Vt., as a quarterly in 1915. Changed to a monthly in 1920; remained a monthly in 1951. Successive editors: W. G. Watson (1915-22), Lloyd Burlingham (1922-25), C. T. Conklin (1925-50), J. B. Dewey (1950-51). Published by the breed association; object: to promote the breed. From: letter from C. C. Bridges, ed. in 1953, to A. W. Hopkins, dated May 1, 1953. See also Union List.

Dairyman's Price Reporter, published at Pittsburgh, Youngstown, etc., both semimonthly and monthly. Began in 1916, no ending date. See Union List and Ayer's.

National Poultry, Butter and Egg Bulletin, a monthly first published at Chicago, October, 1916. In March 19, 1932 it was united with the United States Egg and Poultry Magazine. See Union List.

Black and White Record, founded as a weekly at Lacona, N.Y., on January 1, 1916. Owned and edited by E. M. Hastings and M. S. Prescott from 1916 to 1918, when it was merged with the Holstein-Friesian World. The object of the publication: "The every-week Journal of Holstein Progress." Source: Questionnaire filled out by M. S. Prescott.

Goat World, a monthly begun at Vincennes, Indiana, or Baldwin Park, California, and published several places. Founded by J. T. Henty in 1916. Discontinued about 1945; subscription list taken over by the Dairy Goat Journal. Sources: Union List and Ayer's; Questionnaire, postmarked Columbia, Missouri, April 13, 1953.

Dairymen's League News, begun as a weekly at New York, N.Y., on February 1, 1917. Published by the Dairymen's League Coöperative Association. Successive editors: G. W. Bush (1917-18), E. R. Eastman (1918-22), D. J. Carter (1922-47), George Lee (1947-51). Published as weekly, 1917-18; semimonthly, 1919-20; weekly from 1921 to sometime in World War II, when a paper shortage forced

publication every other Tuesday. Aim of the journal: to promote bigger and better farm organizations, high-quality dairy products, low costs of production, larger use of dairy products, and to express the viewpoints of the farmers who owned it. Source: letter from George Lee to A. W. Hopkins, dated October 22, 1951. See also, Union List.

New England Dairyman, founded as a monthly at Boston in April, 1917. The first editor was H. F. Kendall. Aim of the publication: "to inform the members of the New England Milk Producers' Association what is happening in dairy field." Source: letter from John P. Neville, editor, to A. W. Hopkins, dated November 8, 1951. See also: Union List.

Journal of Dairy Science, began as a bimonthly at Baltimore, Maryland, in May, 1917. Later changed to a monthly. Published by the American Dairy Science Association as "a medium for the discussion of general and technical problems relating to science of dairying. . . ." It particularly covered the subjects of dairy bacteriology and chemistry, and was intended to carry the results of original research in those fields. Successive editors: J. H. Frandsen (1917-27), A. C. Dahlberg (1928-37), T. S. Sutton (1938-46), F. E. Nelson (1947-51 or later), P. R. Ellsworth in a letter to A. W. Hopkins claimed the journal began in March, 1916, but this is in conflict with Union List of Serials. See also letter from J. H. Frandsen to A. W. Hopkins, dated December 3, 1951; letter from F. E. Nelson to A. W. Hopkins, dated December 21, 1951. More details available in Journal of Dairy Science, vol. 36, pages 801 to 809.

Ice Cream Review, begun at Milwaukee as a monthly in August, 1917. Successive editors: B. D. White (1917-18), J. G. Moore (1918-20), E. K. Slater (1920-51). Source: Questionnaire, postmarked April 8, 1953. See also Union List.

Western Milk Dealer and Dairy Counselor, begun at Seattle, Washington, in 1918 as the Northwest Milk Dealer and Producer. From 1919 to 1926 it appeared as the Western Milk Dealer and Dairyman. See Union List.

Iowa Dairy Marketing News, begun as a monthly at Des Moines and had some change of title. Began in 1918. Successive editors: J. H. Mason, D. H. Reynolds, A. N. Heggen. Object: "To establish a common source of information for the members of the Des Moines Co-operative Dairy." Source: Questionnaire, postmarked April 9, 1953. Also Union List.

B. New Dairy Journals, 1919-1929

Thirty-seven papers appeared between 1919 and 1929. These included a large number of cooperative house organs. There were also a few breed journals, and some specialized papers. Chronologically these were:

Connecticut Milk Producers' Association Bulletin, first published in 1919 by the association as a monthly at Hartford. Its object was "To keep members informed of marketing problems and what is going on in their cooperative." Source: Questionnaire.

Milking Shorthorn Journal, a bimonthly, begun at Independence, Iowa, in 1919. See Union List.

Michigan Milk Messenger, a monthly first published at Fowlerville, in June, 1919, by the Michigan Milk Producers Association. Successive editors: R. C. Reed; committee, N. L. Noon, H. W. Norton, L. W. Harwood; in 1951 L. W. Morley was editor. Moved to Detroit in 1923. Object: "Published monthly . . . in the interests of the producing and consuming public." Source: Letter from L. W. Morley to A. W. Hopkins, dated October 11, 1951.

Dairy and Stock Ranch, a semimonthly, begun at San Francisco in 1919. The journal ceased publication in 1925. See Union List.

American Association of Creamery and Butter Manufacturers, a weekly which began some time around 1919 and ceased publication in 1921. Was published at Chicago.

Produce Packer, a weekly market report first published at Kansas City, Missouri, in 1920. Source: Questionnaire and Union List.

Federation Guide and Market News, probably a coöperative publication. It appeared monthly and was published at Plymouth, Wisconsin, from 1920 to 1934. Union List.

Red Polled Journal, published at Minneapolis from 1920 to 1929. See Union List.

Southern Dairyman, published at Montgomery, Alabama, from 1920 to 1923. See Union List.

Inter-State Milk Producers Review, a monthly, begun at Philadelphia, by F. P. Willits in 1920. First published by the Inter-State Milk Producers' Association and later by the coöperative of the same name. Successive editors: August Miller, H. E. Jamison. Object of the journal: to give the members association news and market information. Source: Letter from H. E. Jamison to A. W. Hopkins, dated October 17, 1951; Questionnaire; Inter-State Milk Producers Review, 31 (May, 1950), 2.

Co-operative Dairy Farmer, a monthly founded at Wauseon, Ohio, in April 1921; published by the Northwestern Coöperative Sales Company. Edited by the manager of the company. Successive editors: E. D. Waid (1929-36), J. R. Smart (1936-50), Glen Wagner (1950 on). Purpose: "to furnish market news and association information to the membership." Later moved to Toledo, Ohio. Source: Letter from Glen Wagner to A. W. Hopkins, dated November 21, 1951.

Dairy Journal, a monthly, published at Portland, Oregon, 1921 to 1927. See Union List.

Brown Swiss Bulletin, a monthly founded at Beloit, Wisconsin, in 1922, and published by the Brown Swiss Cattle Breeders' Association. Its early editors were: Charles D. Byrne (1922-23), Ralph Ammon (1923-24), Byron F. Heal (1924-25), Frank J. Holt (1925-28). Source: Letters from Charles D. Byrne to A. W. Hopkins, dated April 8, 1953; letter from Byron F. Heal to A. W. Hopkins, dated April 27, 1953; letter from Frank J. Holt to A. W. Hopkins, dated March 28, 1953.

Ice Cream Field, a monthly begun in 1922 at Atlanta, Georgia,

and subsequently moved to New York. See Union List.

California Dairyman, a biweekly founded at Paramount in February, 1922, and first edited by T. Moore. Later moved to Los Angeles. Object: "vigorous, realistic attitude and action to protect and promote the interests of the milk producer in particular and the dairy industry in general." Source: Letter from Paul L. Schwartz to A. W. Hopkins, dated October 23, 1951.

Dairy World, a monthly founded at Chicago in 1922. The editor from 1922 to 1950 was Roscoe P. Chase. Object: "To provide general news of dairy processing industry to industry members." Source: Questionnaire; Union List.

Land O'Lakes News, a monthly founded in 1922 and published by the Land O'Lakes Creamery. Editor from 1922 to 1950, John Brandt. Published at Minneapolis. Source: Questionnaire.

Breeder and Dairyman, a monthly published at Harrisburg, Pennsylvania, from 1922 to 1937. See Union List.

Dairy Farm Leader, a monthly published at Chicago from 1922 to 1931. There were several title changes. See Union List.

Cheesekraft, published between 1922 and 1926.

Washcoegg, a weekly begun in June, 1923 at Seattle. Changed to a monthly in 1938. Published by Washington Egg Producers, but later designed for all commercial farmers. First editor, Charles E. Boughner; editor in 1951, Richard C. Bell. Sources: Letter from R. C. Bell to A. W. Hopkins, dated October 22, 1951; letter from Bernelda Roberts to A. W. Hopkins, dated October 26, 1951.

Dairy Goat Journal, a monthly founded at Ensign, Kansas, in 1923. Published later at Fairbury, Nebraska, and Columbia, Missouri. Successive editors: Rush Dearfourff (1923-25), Corl A. Leach (1925-53). Objective: "Serve interests of dairy goat industry." Source: Questionnaire.

Dairymen's Review, a monthly published at Cincinnati from 1923 to 1937. See Union List.

Dairy Products Merchandising, a monthly published at Detroit from 1923 to 1931. See Union List.

Milk Goat News, a semimonthly published at San Francisco; Dodge City, Kansas, and other places, between 1923 and 1926.

Cow and Hen Journal, a monthly, first published at Palmer, Kansas, in 1924. Later moved to Linn, Kansas. Edited by A. L. Higgins from 1924 to 1951. Object: "promote local dairying and poultry raising." Source: Letter to A. W. Hopkins, no date, presumably from A. L. Higgins.

California Dairy News, published at Sacramento and Fresno between 1925 and 1929. Source: Union List.

Certified Milk Magazine, a monthly first published at New York in 1926; later published at Scranton, Pennsylvania, Chicago, and New York. First edited by George B. Spender, from 1926 to 1930. Objective: "It was established to provide consumers, physicians, dairy farmers, health officials, members of the Certified industry and others with information about production of not only Certified milk, but all high quality milk." Source: Questionnaire: letter from Charles Speaks, for the editorial board, to A. W. Hopkins, April 29, 1953.

American Creamery Operator and the Milk and Ice Cream Plant, a semimonthly first published at St. Paul in 1926. See Union List.

Pure Milk Magazine, a monthly first published in September, 1926, published by Pure Milk Association. "The purpose of this publication has been from the beginning to help hold together the membership . . . and to give dairy farmers in the Chicago milk shed more detailed information on the Chicago milk market . . ." First editor, Don Geyer; editor in 1951, Lloyd Burlingham. Source: Letter from L. Burlingham to A. W. Hopkins dated November 14, 1951.

Denver Milk Market Review, a monthly first published at Colorado Springs in 1926. The title changed somewhat between 1926 and 1950. See Union List.

Milk Producers Review, a monthly founded at Peoria in 1927. First editor, Wilfred Shaw, 1927-35; second, Evelyn Connelly, 1935-53. Objective: "To give our shippers the market news." Source: Questionnaire.

Southern Dairy Products Journal, a monthly established at Atlanta by Fred H. Sorrow in January, 1927. First editor was J. H. Reed, editor in 1951, Roy C. Jarnagin. Purpose: "A source of valuable information and a means of instruction to every member of the trade." Source: letter from Roy C. Jarnagin to A. W. Hopkins, dated October 19, 1951; Southern Dairy Products Journal, 1 (Jan., 1927), 1.

Eastern Milk Producer, a semimonthly published at Cobleskill, New York, from 1927 to 1939. Changed title in 1939. See Union List.

Southern Dairyman, published at Atlanta, Georgia, from 1927 to 1930. See Union List.

Confectionery and Ice Cream World, a weekly founded at New York in 1929. Source: Questionnaire; Union List.

Southern Dairyman, published at Shreveport, Louisiana, from 1929 to 1930. See Union List.

C: New Dairy Journals, 1930-1941

Between 1930 and 1941 ten new dairy journals appeared. In chronological order these were:

Dairy Papers Associated, begun at Carthage, Missouri, in 1931. Its purpose: "To encourage dairymen to produce a better dairy product." Editor from 1931 to 1951 was J. T. Hanley. Source: Letter from J. T. Hanley to A. W. Hopkins, dated October 23, 1951.

Milk Inspector, a monthly first published at Ventura, California, as the Milk Sanitarian in 1932. Later published for a while at Santa Barbara. Objective: "It served as the official publication of the California Association of Dairy and Milk Inspectors." Successive editors: H. C. Ericksen, M. Heinzman. It was intended to "disseminate scientific information . . . to its readers." Ceased publication in 1937. Source: Letter from H. C. Eriksen to A. W. Hopkins, dated May 12, 1953.

Vitamin D Milk, a monthly published at New York from 1934 to 1938.

Florida Cattleman and Livestock Journal, a monthly begun at

Kissimee, Florida, in October, 1936, as the Florida Cattleman and Dairy Journal. A dairy section was included in the journal in January, 1937. Successive editors: Jimmy Williams (1936-40), Al Cody (1940-46), Bob Cody (1946 on). Source: Questionnaire.

Certified Milk, a monthly published at New York from 1937 to 1951, and perhaps longer.

Modern Dairyman, a monthly begun at St. Paul in September, 1939, and first edited by Henry Sandholt. Subsequent editors: E. J. Gordon and W. A. Gordon. It was published by the same company that publishes the Dairy Record and was a farm modification of the earlier paper. Source: Letter from W. A. Gordon to A. W. Hopkins, dated November 9, 1951.

Union Farmer, a monthly founded at Ogdensburg, New York, in July, 1938. After March, 1939, it changed title to the Dairy Farmer.

Eastern Milk Producer, a monthly founded at Cobleskill, New York, in December, 1939. Objective: "To report current prospective milk marketing conditions and problems to the membership." Successive editors: Homer Rolfe (1939-45), Russell Spaulding (1945-48), John C. York (1948 on). Source: Questionnaire.

Dairy Farmer's Digest, a monthly founded at Metuchen, New Jersey, in November, 1939.

American Dairy Goat News, a monthly first published at Richmond Virginia, later moved to Charlotte, North Carolina. Begun in 1939.

D: Dairy Journals Published in 1950

The following is an alphabetical list of dairy periodicals which were being published in the year 1950. The list is based on Ayer's.

American Butter and Cheese Review. New York. Monthly.

American Dairy Goat News. Richmond. Monthly.

American Milk Review. New York. Monthly.

Brown Swiss Bulletin. Beloit, Wis. Monthly.

California Dairyman. Hynes, Calif. Biweekly.

California Milk News. Los Angeles. Weekly.

Certified Milk. New York. Monthly.

Cheese Reporter. Sheboygan Falls. Weekly.

Co-operative Dairy Farmer. Toledo. Monthly.

Cow and Hen Journal. Linn, Kan. Monthly.

Creamery Journal. Waterloo, Iowa. Monthly.

Dairy Goat Journal. Columbia, Mo. Monthly.

Dairy Industries Unit. Milwaukee. Monthly.

Dairy Papers Associated. Carthage, Mo. Semimonthly.

Dairy Record. St. Paul. Weekly.

Dairy World. Chicago. Monthly.

Dairyland News. Madison. Monthly.

Dairymen's Journal. East St. Louis, Ill. Monthly.

Dairymen's League News. New York. Biweekly.

Dairymen's Price Report. Salem. Monthly.

Delaware County Farm and Home Bureau News. Walton, N.Y. Monthly.

Farm and Dairy. Salem, Ohio. Weekly.

Florida Cattleman and Livestock Journal. Kissimee, Fla. Monthly.
Florida Poultry and Dairy Journal. Zephyrhills, Fla. Monthly.
Guernsey Breeders' Journal. Peterborough, N.H. Semimonthly.
Hoard's Dairyman. Ft. Atkinson, Wis. Semimonthly.
Holstein-Friesian World. Lacona, N.Y. Semimonthly.
Ice Cream Field. New York. Monthly.
Ice Cream News. Los Angeles. Monthly.
Ice Cream Review. Milwaukee. Monthly.
Ice Cream Trade Journal. New York. Monthly.
Independent Producer's Guide. Syracuse, N.Y. Monthly.
Inter-State Milk Producer's Review. Philadelphia. Monthly.
Jersey Bulletin. Indianapolis. Semimonthly.
Journal of Dairy Science. Columbus. Monthly.
Journal of Milk and Food Technology. Albany. Bimonthly.
Michigan Milk Messenger. Detroit. Monthly.
Milk Dealer. Milwaukee. Monthly.
Milk Plant Monthly. Chicago. Monthly.
Milking Shorthorn Journal. Chicago. Monthly.
Modern Dairyman. St. Paul. Monthly.
National Butter and Cheese Journal. Milwaukee. Monthly.
New England Dairyman. Boston. Monthly.
Northwest Farm News. Bellingham, Wash. Weekly.
Pacific Dairy Review. San Francisco. Monthly.
Pennsylvania Holstein. Salem, Ohio. Monthly.
Pure Milk. Chicago. Monthly.
Southern Dairy Products. Atlanta. Monthly.
Stock and Dairy Farmer. Duluth. Monthly.
Washcoegg. Seattle, Wash. Monthly.
Western Dairy Journal. Los Angeles. Weekly.

Notes

Chapter 1

- 1 A few less important papers appeared before 1810. Jared Eliot's Essays upon Field Husbandry in New England was published irregularly as a journal between 1748 and 1759. The Massachusetts Agricultural Repository and Journal, published at Boston in 1798 by the Massachusetts Society for Promoting Agriculture, appeared irregularly, although it was meant to be a semiannual. Daniel Adams' Medical and Agricultural Register of Boston, came out as a sixteen-page monthly between 1806 and 1807. For a more full analysis of these early journals see Richard Bardolph, Agricultural Literature and the Early Illinois Farmer (Urbana, 1948), pp. 90-92; also Frank J. Holt, "The Agricultural Press of America, 1792-1850" (unpublished M.S. thesis, University of Wisconsin, 1925).

- 2 P. W. Bidwell and J. I. Falconer, History of Agriculture in the Northern United States, 1620-1860 (New York, 1941), pp. 424-26.

A distinction between commercial and subsistence farming is difficult to establish. As Rodney C. Loehr, in his article, "Self-Sufficiency on the Farm," Agricultural History, XXVI (Apr., 1952), pp. 37-41, points out, subsistence farming has never meant that the farmer produced everything or even most of what he used. Nevertheless, it should be obvious that there is some difference between a West Virginia ridge-runner and a millionaire stockman. The former, in the sense intended in this work, is a subsistence farmer; the latter a commercial farmer. The distinction between commercial and subsistence farming must be broad, because otherwise the definition becomes too rigid and results in useless, if not false, classifications.

Two farm leaders noted that in the 1940 census over half the farmers were listed as producing less than 10 per cent of the nation's food and fiber. They concluded, however tentatively, that the lower half of the farm population were primarily subsistence farmers. Not all of them were by far, but the general estimate of the census may be useful.

Perhaps a subsistence farmer is one who sells less than 10 per cent of his crop for cash. See Allan Kline, "What the Farmers Want," Annals of the American Academy of Political and

Social Science, CCLIX (Sept., 1948), pp. 122-27; also, William Nichols, "A Price Policy for Agriculture, Consistent with Economic Progress, That Will Promote Adequate and More Stable Income From Farming," Journal of Farm Economics, XXVII (Nov., 1945), pp. 743-51.

Another possible definition might rest on the attitude of the farmer to his farm. Is it primarily a home or is it primarily a business? If a home, the farmer might be tending toward subsistence farming. The answer to the question cannot be arrived at statistically, and even if it could, it would include too many suburbanites and exclude too many commercial farmers. Another and possibly more reasonable distinction might be based on the answer to the question, Does the farm produce only a living, or does it yield a profit in the economic sense? Unfortunately, depressions tend to nullify definitions based on the answer to that question. A farmer could be a commercial farmer and still be dirt poor.

Ultimately the distinction must come to this: Common sense indicates that there is a difference between subsistence and commercial farming, and the difference includes, in varying degrees, all of the above proposed definitions.

Roughly and finally, a subsistence farmer primarily eats what he raises; a commercial farmer sells food in order to buy other foods and other things he may wish to have.

- 3 Bidwell and Falconer, Agriculture in the Northern United States, pp. 208, 281-305; Fred Shannon, America's Economic Growth (3d ed.; New York, 1951), pp. 274-76.
- 4 Howard Ruede, Sod-House Days, Letters from a Kansas Homesteader, 1877-78, ed. John Ise (New York, 1937), pp. 101-2; James Stuart, Three Years in North America (New York, 1833), II 219; Rebecca Burlend, A True Picture of Emigration, ed. M. M. Quaife (Chicago, 1936) pp. 76-77, for some examples of Western dairying.
- 5 Shannon, America's Economic Growth, pp. 136-38; U.S. Census, 1900, Vol. V: Agriculture (Washington, D.C., 1902) p. 688.
- 6 Bidwell and Falconer, Agriculture in the Northern United States, p. 182; Shannon, America's Economic Growth, p. 274.
- 7 U.S. Census, 1900: Statistical Atlas (Washington, D.C., 1903), plate 23.
- 8 Shannon, America's Economic Growth, pp. 145-46, 150-52, 160, 161.
- 9 Percy W. Bidwell, "The Agricultural Revolution in New England," American Historical Review, XXVI (July, 1921), p. 691.
- 10 Bidwell and Falconer, Agriculture in the Northern United States, pp. 189-92.
- 11 Ibid.
- 12 Shannon, America's Economic Growth, p. 282.
- 13 Bidwell, "The Agricultural Revolution in New England," American Historical Review, XXVI (July, 1921), p. 691.
- 14 Cultivator, 1 (2d ed.; Albany, 1838, reprinted in book form from the original magazine of 1834), 15, for the first example of this trend.

- 15 Bardolph, Agricultural Literature, p. 19; Bidwell and Falconer, Agriculture in the Northern United States, p. 320.
- 16 See first citation, this chapter.
- 17 Claribel Barnett, "The Agricultural Museum; An Early American Agricultural Periodical," Agricultural History, II (Apr. 1928), pp. 99-102; Agricultural Museum, 1 (Georgetown, D.C., 1810), pp. 1, 224.
- 18 American Farmer, 2 (Baltimore, 1821), 81, 318.
- 19 American Farmer, 1 (Baltimore, 1819), 137, 139.
- 20 American Farmer, 1 (Baltimore, 1819), 137, 139.
- 21 Ibid., p. 90.
- 22 Ibid., p. 70.
- 23 Ibid., pp. 137, 139.
- 24 New England Farmer, 4 (Boston, 1826), 84.
- 25 Ibid., pp. 395-96; American Farmer, 1 (Baltimore, 1819), 137-39.
- 26 New England Farmer, 4 (Boston, 1826), 217.
- 27 American Farmer, 15 (Baltimore, 1833), 25.
- 28 Herbert Kellar, "John S. Skinner," Dictionary of American Biography, XVII, 199; Stephen C. Stuntz, List of the Agricultural Periodicals of the United States and Canada Published During the Century July 1810 to July 1910, ed. Emma B. Hawks ("U.S. Department of Agriculture Miscellaneous Publications," No. 398, [Washington, D.C., 1941]), p. 7.
- 29 New England Farmer, 4 (Boston, 1826), 1-5.
- 30 Ibid., p. 225; for views of Pickering, pp. 41-43.
- 31 New England Farmer, 10 (Old Series) or 1 (New Series) (Boston, 1832), 224.
- 32 Cultivator, 1 (2d ed.; Albany, 1838), 15.
- 33 Ibid.
- 34 Ibid., p. 41.
- 35 Ibid., p. 66.
- 36 Cultivator, 4 (2d ed.; Albany, 1838), 81.
- 37 New England Farmer, 19 (Old Series) or 10 (New Series) (Boston, 1840-41), 156; italics added.
- 38 Cultivator, 1 (New Series, New York, 1844), 39.
- 39 Claribel Barnett, "Luther Tucker," Dictionary of American Biography, XIX, 35-36.
- 40 Cultivator, 1 (New Series, New York, 1844), 39.
- 41 Genesee Farmer, 12 (Rochester, 1851), 86; compare this production of butterfat of Carnation Homestead Daisy Madcap with a record of 1500 pounds of fat in 1952, Holstein-Friesian World, 50 (Lacona, N.Y., Jan. 17, 1953), 81.
- 42 Genesee Farmer, 12 (Rochester, 1851), 41.
- 43 Prairie Farmer, 8 (Chicago, 1848), 56-57.
- 44 Monthly Journal of Agriculture, 2 (New York, 1847), 75, 120-23, 121, 590; ibid., 3 (New York, 1848), 285-89, 627.
- 45 Monthly Journal of Agriculture, 2 (New York, 1848), 108.
- 46 American Agriculturist, 1 (New York, 1843), passim.
- 47 E. V. Wilcox, "Anthony B. Allen," Dictionary of American Biography, I, 185-86; Alfred C. True, "Richard L. Allen," Dictionary of American Biography, I, 205-06.
- 48 American Agriculturist, 7 (New York, 1848), passim.

- 49 Ibid.
- 50 Cultivator, 3 (2d ed., Albany, 1838), 169.
- 51 Genesee Farmer, 13 (Rochester, 1852), 110-11.
- 52 Prairie Farmer, 8 (Chicago, 1848), 56-57.
- 53 New England Farmer, 10 (Old Series) or 1 (New Series) (Boston, 1832), 369; also see index to the volume.
- 54 Ibid., pp. 30, 70.
- 55 New England Farmer, 4 (Boston, 1835), 273-74.
- 56 Ibid., p. 206.
- 57 Cultivator, 3 (2d ed.; Albany, 1838), 143; ibid., 4 (2d ed.; Albany, 1838), 134.
- 58 Lin Yutang, My Country and My People (New York, 1939), quotation from Cultivator, 1 (New Series, New York, 1844), 148.
- 59 Cultivator, 1 (New Series, New York, 1844), 182.
- 60 American Agriculturist, 7 (New York, 1848), 69.
- 61 Ohio Cultivator, 6 (Columbus, 1850), 244.
- 62 Ibid., pp. 89, 180, 194-96.
- 63 Cultivator, 6 (New Series, New York, 1849), 141.
- 64 Ibid., p. 10.
- 65 Ibid., p. 234.
- 66 Cultivator, 6 (New Series, New York, 1849), 141.
- 67 See Bidwell and Falconer, Agriculture in the Northern United States, pp. 194 and 316 for estimates of circulation. The complaints of editors concerning the stubborn complacency of farmers were constant and hardly require documentation. Any volume of any paper will offer some evidence. Also see Bardolph, Agricultural Literature, p. 13; speaking of the country newspaper Bardolph remarks: "The wonder is that so little material of this sort on agriculture was published, especially when it is remembered how readily the agricultural press might be drawn on for clippings. Since the editorial fraternity is notoriously quick to respond to public caprice, one wonders if the answer does not lie in the hypothesis that the rural population did not know the value of agricultural literature, and that the editors themselves were either unconvinced or too indolent and spineless to challenge a popular prejudice against book farming." Ibid., p. 56.
- 68 Genesee Farmer, 13 (Rochester, 1852), 111.
- 69 Ohio Cultivator, 6 (Columbus, 1850), 351.
- 70 Ibid., p. 259-60.
- 71 American Agriculturist, 10 (New York, 1851), 44.
- 72 Ibid., p. 284-85.
- 73 Claribel Barnett, "Luther Tucker," Dictionary of American Biography, XIX, 35-36.
- 74 Country Gentleman, 1 (New York, 1853), 229.

Chapter 2

- 1 Stuntz, List.
- 2 For a vivid description of dairying within the city of New York in 1842, see John S. Skinner and Francis Guénon, A Treatise on Milch Cows, With Introductory Remarks and Observations on the Cow and the Dairy (New York, 1846), p. 25ff.

- 3 Joseph Reall, Dairying and Dairy Improvements (New York, 1882), p. 32.
- 4 Western Reserve Farmer and Dairyman, 1 (Jefferson, Ohio, Mar. 1, 1852), 1, 8.
- 5 Ibid., p. 8.
- 6 Letter from N. E. French to W. H. Cathcort, dated Aug. 29, 1908 and inserted in the front of the volume of Western Reserve Farmer and Dairyman, 1 (Jefferson, 1852).
- 7 It is worth noting that Little Falls, N.Y., later became the center for the Chris Hansen Laboratories. This firm manufactured rennet, "Junket," and other products.
- 8 Bidwell and Falconer, Agriculture in the Northern United States, p. 430; U.S. Commissioner of Agriculture, Annual Report, 1865 (Washington, D.C., 1865), p. 432.
- 9 Dairyman's Record, 1 (Little Falls, N.Y., 1859), volume binding, 1.
- 10 Ibid.
- 11 Ibid.
- 12 Dairyman's Record, 1 (Little Falls, Feb. 15, 1859), 1-2.
- 13 Ibid., p. 8; ibid. (Mar. 15, 1859), p. 24.
- 14 Ibid. (Feb. 15, 1859), pp. 3-5, 7; ibid. (Mar. 1, 1859), pp. 9-10; ibid. (Octo 1, 1859), p. 132.
- 15 Ibid. (Mar. 1, 1859), pp. 10-11.
- 16 Ibid., p. 11.
- 17 Ibid., p. 12.
- 18 Ibid. (Mar. 15, 1859), pp. 17-18.
- 19 Ibid.; ibid. (Mar. 15, 1859), p. 21; ibid. (May 16, 1859), p. 54.
- 20 Ibid. (July 15, 1859), p. 81.
- 21 Ibid.
- 22 Ibid.
- 23 Ibid., p. 82.
- 24 Ibid. (Mar. 1, 1859), p. 11.
- 25 Ibid., pp. 11-12; ibid. (Oct. 15, 1859). p. 133; ibid. (Dec. 1, 1859), pp. 158-59; ibid., pp. 152-55.
- 26 Ibid. (Feb. 15, 1859), p. 3.
- 27 Ibid.
- 28 See Chapter 1 for previous examples of journalistic demands for public support of education and experimentation.
- 29 Dairyman's Record, 1 (Oct. 15, 1859), 130-31.
- 30 Ibid. (Aug. 15, 1859), pp. 99-103.
- 31 Dairyman's Record, 1 (Little Falls, 1859), volume binding, 1.
- 32 Dairy Farmer, 1 (Little Falls, May, 1860), 2.
- 33 Dairyman's Record, 1 (Little Falls, 1859), volume binding, 1.
- 34 Dairy Farmer, 1 (Little Falls, May, 1860), 2.
- 35 Ibid.
- 36 Ibid.
- 37 Ibid.
- 38 Dairyman's Record, 1 (Little Falls, Jan. 15, 1860), 179.
- 39 Dairy Farmer, 1 (Little Falls, May, 1860), 2-5, 10-16.
- 40 Ibid. (May, 1860), p. 20; ibid. (Aug., 1860), pp. 118-21.
- 41 Ibid., p. 99; Dairyman's Record, 1 (Little Falls, Mar. 15, 1859), 22.
- 42 Ibid. (Aug., 1860), pp. 89 and 121; ibid. (Nov., 1860), p. 222.

- 43 Ibid. (May, 1860), p. 22; ibid. (Aug., 1860), p. 98; ibid., pp. 104-09; ibid., pp. 109-11.
- 44 Ibid. (Mar. 15, 1859), pp. 20-21.
- 45 Dairy Farmer, 1 (Little Falls, May, 1860), 7, 9.
- 46 Quoted from the Springfield, Massachusetts, Republican in the Dairy Farmer, 1 (Little Falls, May, 1860), 26.
- 47 Dairyman's Record, 1 (Little Falls, Mar. 1, 1859), 12-14; ibid. (Mar. 15, 1859), pp. 20-21.
- 48 Ibid. (Sept., 1859), p. 105.
- 49 Dairy Farmer, 1 (Little Falls, Nov., 1860), 222.
- 50 Dairyman's Record, 1 (Little Falls, Mar. 15, 1859), 17; ibid. (Aug. 15, 1859), p. 97.
- 51 Dairy Farmer, 1 (Little Falls, Aug., 1860), 128.
- 52 Ibid. (Aug., 1860), p. 123; ibid. (May, 1860), p. 2; ibid. (Aug., 1860), p. 98.
- 53 Ibid. (May, 1860), p. 31.
- 54 Ibid. (Nov., 1860), p. 199.
- 55 Ibid. (May, 1860), p. 17.
- 56 Ibid.
- 57 Ibid. (Nov., 1860), p. 210; other remarks on politics, passim.
- 58 Ibid. (May, 1860), p. 28.
- 59 Ibid. (Nov., 1860), p. 212.
- 60 Ibid. (April, 1861), p. 366.
- 61 Ibid.
- 62 Ibid.
- 63 Ibid., 2 (1861), passim.
- 64 Ibid. (June, 1861), p. 18.
- 65 Ibid., front cover.
- 66 Ibid., p. 1.
- 67 Ibid., pp. 9-11.
- 68 Ibid., pp. 18-19.
- 69 Lauren B. Arnold, b. 1888, dairy farmer, teacher and mechanic. He graduated from Union College in 1843. Arnold wanted to teach but his father talked him into staying on the farm. In 1857 he helped form the Little Falls Farmers' Club. In 1885 he was appointed U.S. representative to the British Dairyman's Association conference. E. H. Jenkins, "Lauren B. Arnold," Dictionary of American Biography, I, 369-70.
Xerxes Addison Willard, b. 1820-d. 1882, farmer and writer. He studied law and helped form Little Falls Farmers' Club in 1857. Willard studied the principles of milk production, and cheese and butter manufacture. He wrote Practical Dairy Husbandry, (1871) and The Practical Butter Book, (1876). H. H. Wing, "Xerxes Addison Willard," Cyclopedia of American Agriculture, ed. L. H. Bailey, vol. IV (London, 1909).
- 70 Dairy Farmer, 2 (Little Falls, June, 1861), 29.
- 71 Ibid. (Feb., 1862), pp. 259-61.
- 72 Ibid. (Nov., 1861), pp. 167-68.
- 73 Ibid., p. 273.
- 74 Ibid. (June, 1861), pp. 7-9.
- 75 Ibid. (Feb., 1862), p. 266.

- 76 Ibid.
- 77 Quoted from Valley Farmer in Dairy Farmer, 2 (Little Falls, June, 1861), pp. 27-28.
- 78 Ibid., p. 28.
- 79 Ibid. (Nov., 1861), p. 181; ibid., pp. 178-80.
- 80 Quoted from Rural Minnesotan in Dairy Farmer, 2 (Little Falls, Nov., 1861), p. 173; ibid., p. 168; ibid. (Feb., 1862), p. 260-61.
- 81 Dairy Farmer, 2 (Little Falls, Nov., 1861), p. 192; ibid. (June, 1861), pp. 25-26.
- 82 Ibid., 1 (Nov., 1860), 213.
- 83 Ibid., 2 (Nov., 1861), 177-78.
- 84 Ibid. (May, 1862), p. 369.
- 85 Ibid. (May, 1862), p. 369.
- 86 Ibid. (Feb., 1862), p. 266.

Chapter 3

- 1 See Bardolph, Agricultural Literature pp. 42-48 for an extensive treatment of the subject of agricultural libraries before 1870; also see H. E. Alvord, "Dairy Development in the United States," Yearbook of the United States Department of Agriculture, 1899 (Washington, D.C., 1900), pp. 491-512 for discussion of libraries.
- 2 U.S. Census, 1900, vol. V: Agriculture (Washington, D.C., 1902) pp. 704, 705, 711. Lists of cattle, cheese production and butter production. These indicate decreases in several cases, only slight increases for other states between 1860 and 1870; T. R. Pirtle, History of the Dairy Industry (Chicago, 1926) 103, 166.
- 3 Solon J. Buck, The Granger Movement (Cambridge, Mass., 1913) 58-59; Fred Shannon, The Farmer's Last Frontier (New York, 1945) 310-11.
- 4 U.S. Census, 1880: Report of the Manufacturers of the United States (Washington, D.C., 1883) 450; U.S. Census, 1870, vol. III: The Statistics of the Wealth and Industry of the United States, (Washington, D.C., 1870) p. 594; Stuntz, List.
- 5 Rowell's American Newspaper Directory, 1883 (New York); Stuntz, List; The Dairy Messenger, 1 (Chicago, Jan., 1892) 15.
- 6 Rowell's American Newspaper Directory 1883, (New York), for the years 1880, and 1886; Stuntz, List.
- 7 Rowell's American Newspaper Directory, 1886; Stuntz, List; American Dairyman, 46 (New York, Dec. 29, 1904), subtitled: "A Weekly Record of Dairy and Stock Breeding Interests at Home and Abroad," cover of the issue.
- 8 American Dairyman, 61 (New York, Sept. 12, 1907), 2; Stuntz, List.
- 9 The Dairy Messenger, 1 (Chicago, Jan., 1892) 15, but this reference is not altogether reliable; see also Stuntz, List; Dairy World, 14 (Chicago, Jan., 1894), 10.
- 10 For example: Creamery Journal, 9 (Waterloo, Iowa, Jan., 1898), 15.
- 11 That is, if later issues of the magazine are any indication of his earlier policy, i.e., Dairy World, 14 (Chicago, 1894) 10; Stuntz,

- List; also, see below, Chapters 5 and 9. After about 1900 Dairy World tended to emphasize dairy farming.
- 12 Dairy World, 14 (Chicago, 1894), passim.
 - 13 Stuntz, List; Dairy World, 14 (Chicago, Jan., 1894), 10; Rowell's American Newspaper Directory, 1888, p. 184. The Dairy, founded in New York in 1883 was either a farmer magazine or a merchant journal. It appeared weekly, and failed in 5 months. The demise was more sudden than was usual for dairy periodicals. but the cause of its failure is unknown. See Stuntz, List.
 - 14 Monthly Bulletin of the American Jersey Cattle Club, 1 (Newport, R. I., July, 1877), 1; Jersey Bulletin, 11 (Indianapolis, Jan. 13, 1892), 23.
 - 15 Ibid., 2 (New York, Nov., 1878), 193.
 - 16 Ibid., Monthly Bulletin of the American Jersey Cattle Club, 1 (Newport, July, 1877), 1.
 - 17 Ibid.
 - 18 Skinner and Guénon Treatise on Milch Cows.
 - 19 Monthly Bulletin of the American Jersey Cattle Club, 1 (Newport, July, 1877) 3.
 - 20 Ibid. (Apr., 1878), pp. 490-91 for one of the better examples.
 - 21 Ibid. (July, 1877); ibid., vol. 3 (July, 1879).
 - 22 Monthly Bulletin of the American Jersey Cattle Club, 1 (Newport, Apr., 1878), 491-500; ibid., 3 (May, 1880), 336.
 - 23 Monthly Bulletin of the American Jersey Cattle Club, 2 (New York, Nov., 1878), 193.
 - 24 Ibid.
 - 25 On history of oleomargarine: Pacific Dairy Review, 30 (San Francisco, Calif., Sept., 1926), 18; Shannon, America's Economic Growth, p. 393.
 - 26 Monthly Bulletin of the American Jersey Cattle Club, 3 (New York, May, 1880), 337.
 - 27 Ibid., 4 (New York, June, 1881), 333.
 - 28 Ibid.
 - 29 Stuntz, List.
 - 30 Stuntz, List; Farmer and Dairyman, 2 (Syracuse, N.Y., Apr., 1881), 8.
 - 31 Farmer and Dairyman, 2 (Apr., 1881), 8.
 - 32 Ibid. (Feb., 1882), p. 168.
 - 33 Ibid. (Apr., 1881), p. 9; Curtis also supported farmer organizations. In 1881 he attacked the former editor of the Dairy Farmer of Little Falls, N.Y., for hampering farmer efforts in organization: "Xerxes Archimedes Willard is never in his element except when he is making war in some way upon dairy-men and the dairy interest. Last winter the members of the New York State Dairy-men's Association concluded to ask the Legislature for a charter, that the organization might do business on a legal basis—which none of the dairy-men's organization can do. Straightway, Xerxes Archimedes appears in opposition to the granting of such a charter! Yet, he is not a member of the association, and it is none of his business. Can't dairy-men get rid of this pest, in some way? Must the dirty

foot of this "dry steer" be stuck into everybody's mess?" Ibid.
Willard's middle name was actually Addison.

- 34 See Gerald L. Seaman, "A History of Some Early Iowa Farm Journals (before 1900)," (M.S. thesis, Iowa State College, 1942), p. 56; Bardolph, Agricultural Literature, pp. 147-71.
- 35 Stuntz, List.
- 36 U.S. Census, 1880: Report of the Manufactures of the United States (Washington, D.C., 1883), p. 450; U.S. Census, 1870, vol. III: The Statistics of the Wealth and Industry of the United States (Washington, D.C., 1872), p. 594.
- 37 Seaman, "Early Iowa Farm Journals," p. 72. Actually the first dairy paper in Iowa was the Stock and Dairy Gazeteer published at Sibley, Iowa, 1877-78; Stuntz, List. It is significant that this early paper combined stock raising and feeding with dairying. Probably, the dairy part of the paper was distinctly secondary to the stock portions.
- 38 Seaman, "Early Iowa Farm Journals," pp. 14-15.
- 39 Ibid., p. 15.
- 40 Ibid., pp. 14-15; compare with Stuntz, List, who gives 1886 as the closing date of the journal. Judging from the content of later Iowa papers it is possible that the Dairy Farmer of Chariton favored the dual-purpose cow. If so, this was probably its chief deviation from the general run of dairy magazines. Other examples of this tendency might be found in the Creamery Gazette, 22 (Des Moines, Sept. 15, 1898), 6.
- 41 Stuntz, List; Alden's American Newspaper Catalogue, 1882 (Cincinnati); Ayer's Newspaper Annual, 1882 (Philadelphia), p. 81.
- 42 Alden's American Newspaper Catalogue, 1882; Ayer's Newspaper Annual, 1884; Rowell's American Newspaper Directory, 1888; Stuntz, List.
- 43 Stuntz, List.
- 44 Rowell's American Newspaper Directory, 1884 listed the journal as a weekly nonpartisan paper with a circulation of over 1,000, but no mention was made of its dairying content. In 1894 the title was changed to the Delaware County Dairyman, but the description of the paper was still that of a weekly county newspaper; Ayer's Newspaper Annual, 1886; Rowell's American Newspaper Directory, 1888; Ayer's Newspaper Annual, 1894.
- 45 Shannon, Farmer's Last Frontier, p. 137.
- 46 Monthly Bulletin of the American Jersey Cattle Club, 2 (New York, Feb., 1879), 346.
- 47 Ibid.
- 48 Farmer and Dairyman, 2 (Syracuse, Apr., 1881), 8.
- 49 See Farmer and Dairyman, vol. 2 (Syracuse, Apr., 1881).
- 50 Monthly Bulletin of the American Jersey Cattle Club, 3 (New York, May, 1880), 338.
- 51 Farmer and Dairyman, 2 (Syracuse, June, 1881), 41.
- 52 Shannon, Farmer's Last Frontier, p. 137.
- 53 Farmer and Dairyman, 2 (Syracuse, Apr., 1881), 8.
- 54 Farmer and Dairyman, 2 (Syracuse, Feb., 1882), 168.

55 Ibid.

56 Monthly Bulletin of the American Jersey Cattle Club, 2 (New York, Nov., 1878), 201.

57 U.S. Census, 1900, vol. V: Agriculture (Washington, D.C., 1902), p. 704.

58 U.S. Census, 1870, vol. III: The Statistics of the Wealth and Industry of the United States, (Washington, D.C., 1870), p. 594; U.S. Census, 1880: Report of the Manufactures of the United States (Washington, D.C., 1883), p. 450.

Chapter 4

- 1 Jersey Bulletin, 55 (Indianapolis, July 1, 1936), 818; also letter from Royer H. Brown (editor, Jersey Bulletin) to A. W. Hopkins, Apr. 15, 1952.
- 2 Jenkins for example boasted that his subscribers included "men of ability in the great mercantile world . . . , and form a list in which we may justly take pride." Jersey Bulletin, 4 (Indianapolis, Sept. 30, 1885), 12.
- 3 Rowell's American Newspaper Directory for 1886 and 1887.
- 4 Jefferson County Union, vol. 3 (Ft. Atkinson, Wis., Nov. 15, 1872); Hoard's Dairyman, vol. 16 (Ft. Atkinson, Wis., Mar. 13, 1885); Stuntz, List.
- 5 Hoard's Dairyman, vol. 16 (Ft. Atkinson, Apr. 3, 1885); the high volume number results from the fact that Hoard merely transferred the volume number from his Jefferson County Union to the Dairyman.
- 6 Figures supplied in 1951 by W. D. Knox, editor, Hoard's Dairyman. In 1884 the Democrat and Dairyman was founded at Waterloo, Wisconsin. In 1905 the term "Dairyman" was dropped. Both the New Hampshire and Wisconsin ventures pointed out the locations of the dairy regions of the time. Otherwise, as far as can be determined, they were without great influence on farmers. In 1885 the Farmer and Dairyman was begun at Portland, Oregon. The journal died in 1887. There was some dairying in the region, but obviously the Far West was not ready for a dairy journal. Perhaps, too, the editor did not have the support of a country weekly. For more information on these periodicals see Stuntz, List.
- 7 Stuntz, List, from 1878 on the Guernsey breeders had persistently tried to establish a permanent journal. In 1884, the Herd Register and Breeders' Journal was begun at Peterboro, New Hampshire. Nothing is known of the journal except, that like the Jersey Bulletin, it was a breeders' journal. Its place of publication, however, suggests that it was another in a long line of Guernsey journals.
- 8 Guernsey Breeders' Journal, 84 (Peterboro, N.H., Mar. 15, 1952), 779.
- 9 Guernsey Breeders' Journal, 1 (West Chester, Pa., Jan., 1885), 4; also letter from L. R. Lounsbury (managing editor of Guernsey Breeders' Journal) to A. W. Hopkins, dated Nov. 8, 1951.

- 10 Guernsey Breeders' Journal, 84 (Peterboro, Mar. 15, 1952), 779-80.
- 11 Ibid., p. 780.
- 12 Ibid., p. 781.
- 13 Hoard's Dairyman, 16 (Ft. Atkinson, Nov. 27, 1885), 3.
- 14 Hoard's Dairyman, 16 (Ft. Atkinson, Nov. 27, 1885), 3.
- 15 Joseph H. Beall, Dairying and Dairy Improvements (New York, 1882), p. 32.
- 16 Hoard's Dairyman, 16 (Ft. Atkinson, Nov. 5, 1885), 1.
- 17 Ibid., Oct. 30, 1885), p. 35.
- 18 Jenkins best expressed his attitude in 1899 when he wrote: "A law prohibiting the use of butter color would not hurt the sale of good butter, but would make it necessary for poor butter and oleomargarine to be sold for what they are . . ." Jersey Bulletin, 28 (Indianapolis, June 7, 1899), 471.
- 19 Guernsey Breeders' Journal 1 (West Chester, April, 1885), 23.
- 20 Hoard's Dairyman, 16 (Ft. Atkinson, Mar. 13, 1885).
- 21 Ibid. (Dec. 25, 1885), p. 1.
- 22 Jersey Bulletin, 4 (Indianapolis, Dec. 2, 1885), 166.
- 23 Hoard's Dairyman, vol. 16 (Fort Atkinson, Apr. 3, 1885).
- 24 Guernsey Breeders' Journal, 1 (West Chester, Pa., Apr., 1885), 23.
- 25 Ibid. (June, 1885), p. 58.
- 26 Ibid. (Apr., 1885), p. 32.
- 27 Ibid., p. 25.
- 28 Ibid.
- 29 Jersey Bulletin, 4 (Indianapolis, Dec. 2, 1885), 158.
- 30 Ibid.; Hoard's Dairyman, 16 (Ft. Atkinson, Nov. 6, 1885), 1 and *passim*.
- 31 Jersey Bulletin, 4 (Indianapolis, Sept. 30, 1885), 12.
- 32 Guernsey Breeders' Journal, 1 (West Chester, Jan., 1885), 4.
- 33 Ibid. (June, 1885), p. 58.
- 34 Ibid. (Aug., 1885), p. 80.
- 35 With the breeders it was another question however. As one of them wrote: "I have had years experience in this country with both breeds, Jerseys and Guernseys, and I find the Guernseys will give yellow butter in winter, and the Jerseys will have to be colored." Guernsey Breeders' Journal, 1 (West Chester, Feb., 1885), 17. The editor printed these sentiments, but his main attack was centered on the Ayrshire. For introduction of the Ayrshire, see Chapter 1. For detailed attacks on the Ayrshire, see: Jersey Bulletin, 4 (Indianapolis, Dec. 2, 1885), 161; Guernsey Breeders' Journal, 1 (West Chester, Aug., 1885), 81.
- 36 Hoard's Dairyman, vol. 16 (Ft. Atkinson, May 22, 1885); see also, ibid. (Oct. 23, 1885), p. 1.
- 37 Guernsey Breeders' Journal, 1 (West Chester, Oct., 1885), 96.
- 38 Hoard's Dairyman, 16 (Ft. Atkinson, Dec. 4, 1885), 1.
- 39 Jersey Bulletin, 4 (Indianapolis, Dec. 2, 1885), 158.
- 40 Ibid., 4 (Indianapolis, Oct. 7, 1885), 32, 33-34; Guernsey Breeders' Journal, 1 (West Chester, Oct., 1885), 94.
- 41 Guernsey Breeders' Journal, 1 (West Chester, Oct., 1885), 94-95.

- 42 In any case, productivity did increase. For example, in Wisconsin between 1870 and 1880 the combined butter and cheese production increased from 25,760,000 to 52,440,000 pounds. At the same time the number of dairy cattle increased only from 308,377 to 478,374. Thus the production of dairy products increased 51 per cent, but the number of cattle only 36 per cent. Some of the increased production may be attributed to more efficient machinery, such as the separator, but much of it must have resulted from better stock. About the same increases could be found for any state east of the Mississippi. See U.S. Census, 1900, vol. V: Agriculture (Washington, D.C., 1902), p. 704 and U.S. Census, 1870, vol. III: The Statistics of the Wealth and Industry of the United States, (Washington, D.C., 1870), p. 594, as well as U.S. Census, 1880: Report of the Manufactures of the United States (Washington, D.C., 1883), p. 450.
- 43 Guernsey Breeders' Journal, 1 (West Chester, Feb., 1885), 11.
- 44 Jersey Bulletin, 4 (Indianapolis, Nov. 1, 1885), 14.
- 45 Ibid., 55 (Indianapolis, July 1, 1936), 818.
- 46 Ibid., 11 (June 22, 1892), 405; 4 (Indianapolis, Sept. 30, 1885), 11.
- 47 Guernsey Breeders' Journal, 1 (West Chester, Jan., 1885), 4.
- 48 Jersey Bulletin, 4 (Indianapolis, Sept. 30, 1885), 14.
- 49 Hoard's Dairyman, 16 (Ft. Atkinson, Dec. 4, 1885), 1; see above page 64.
- 50 Jersey Bulletin, 4 (Indianapolis, Sept. 30, 1885), 12. We fear Jenkins would run afoul of foresters in suggesting the possibility or desirability of woodland pastures.
- 51 Jersey Bulletin, vol. 52 (Indianapolis, Oct. 4, 1933).
- 52 Guernsey Breeders' Journal, 1 (West Chester, Nov., 1885), 104.
- 53 Ibid.
- 54 Ibid. (Apr., 1885), p. 157.
- 55 Hoard's Dairyman, vol. 16 (Ft. Atkinson, May 22, 1885).
- 56 Jersey Bulletin, 4 (Indianapolis, Dec. 2, 1885), 157.
- 57 Hoard's Dairyman, 16 (Ft. Atkinson, Nov. 6, 1885), 1.
- 58 Jersey Bulletin, vol. 4 (Indianapolis, 1885); ibid. (Dec. 2, 1885), p. 163.
- 59 Guernsey Breeders' Journal, 1 (West Chester, May, 1885), 45; ibid., passim, subsequent issues.
- 60 The news on Hugo was listed, interestingly enough, under the heading: "Gossip." Guernsey Breeders' Journal, 1 (West Chester, May, 1885), 60; ibid., p. 45.
- 61 Hoard's Dairyman, 16 (Ft. Atkinson, Nov. 6, 1885), 2.
- 62 Ibid. (Apr. 3, 1885).
- 63 Ibid. (Dec. 25, 1885), p. 1.
- 64 Ibid. (Jan. 22, 1886), p. 1; for an example of a later reference to the silo see: Hoard's Dairyman, 49 (Ft. Atkinson, June 11, 1915), 738.
- 65 Hoard's Dairyman, 16 (Ft. Atkinson, Dec. 4, 1885), 1.

Chapter 5

- 1 Milk Reporter, 44 (Sussex, N.J., Dec., 1928), 8.

- 2 Stuntz, List.
- 3 Milk Reporter, 44 (Sussex, Dec., 1928), 8.
- 4 Dairy Messenger, 1 (Chicago, Jan., 1892), 15; Stuntz, List;
American Cheesemaker, 18 (Grand Rapids, Mich., Aug., 1903), 1.
- 5 At least there are no copies available for the period after 1917.
See account of Brownell's Dairy Farmer for a probable explanation of the cause of failure, since the two journals were in about the same position.
- 6 Dairy Messenger, 1 (Chicago, Jan., 1892), 15; American Creamery, 5 (Chicago, Apr. 1, 1892), 8; ibid. (June 15, 1892), p. 8.
- 7 Dairy Messenger, 1 (Chicago, Jan., 1892), 15; American Creamery, 4 (Holly, Mich., Feb. 1, 1891), 8.
- 8 American Creamery, vol. 5 (Chicago, Aug. 1, 1892); Stuntz, List.
- 9 Seaman, "Early Iowa Farm Journals," p. 11-12; Creamery Journal, 2 (Waterloo, Feb., 1891); Dairy Messenger, 1 (Chicago, Jan., 1892), 15.
- 10 Creamery Journal, 3 (Waterloo, Dec. 1, 1892), 16.
- 11 Letter from E. S. Estel (business manager, Creamery Journal) to the Librarian, University of Wisconsin Experiment Station, dated June 15, 1950 and bound with volume 60 of Creamery Journal.
- 12 Chicago Markets, 1 (Chicago, June 9, 1894), 4; Chicago Produce, 1 (Chicago, June 16, 1894), 2.
- 13 Dairy Messenger, 1 (Chicago, Jan., 1892), 15; Elgin Dairy Report, 6 (Elgin, June 1, 1896), 1.
- 14 Union List of Serials in the Libraries of the United States and Canada, ed. Winifred Gregory (New York, 1927).
- 15 Seaman, "Early Iowa Farm Journals," p. 73; Dairy Messenger, 1 (Chicago, Jan., 1892), 15; Stuntz, List; for the Creamery Messenger, see ibid.
- 16 Dairy Messenger, 1 (Chicago, Jan., 1892), 15; the Dairy Column was apparently still in existence in 1890. Boiler plate, that is, the delivery to the local printer of sheets of paper which have been printed on one side and left blank on the other for local news and advertisements, came into existence in its fullest form at Baraboo, Wisconsin, in 1861. The arrangements for boiler plate were generally identical with the description of the Dairy Column as given by Monrad. Sometimes stereotyped plates were shipped to the local printer instead of half-printed sheets. E. S. Watson, History of Auxiliary Newspaper Service in the United States (Champaign, 1923), pp. 7-9.
- 17 Stuntz, List.
- 18 See above, Chapter 4; Stuntz, List.
- 19 Stuntz, List; Holstein-Friesian Register, 4 (Brattleboro, Mar. 1, 1889), 372; ibid., 6 (Brattleboro Mar. 1, 1891), 2.
- 20 Ibid., 4 (Brattleboro, Mar. 1, 1889), 372.
- 21 Stuntz, List.
- 22 Stuntz, List, possibly in 1878 but probably in 1889 L'Elvezia, a journal devoted to dairying, was begun at San Francisco, California. After 1900 it continued as a nonagricultural paper; Stuntz, List.

- 23 Wallace was confusing in his volume numbering, and so the exact founding date is uncertain, but the journal probably began no earlier than 1885 nor later than 1891. Stuntz, List, is probably in error on the founding date; see Chapter 6, note 27, for an estimate of volume numbering by Wallace; for founding dates see Florence W. Johnston, "Contemporary News Stories of Iowa Press Meetings, 1858-1916" (M.S. thesis, State University of Iowa 1932) pp. 110-11; Seaman, "Early Iowa Farm Journals," pp. 54-56.
- 24 Seaman, "Early Iowa Farm Journals," p. 56.
- 25 Stuntz, List, enters it as the Northeastern Iowa Dairy Journal; see Seaman, "Early Iowa Farm Journals," p. 46; Kimball of the Creamery Journal, 3 (Waterloo, Iowa, Jan. 1, 1893), 16, had some words of praise for the Dairy Journal, and offered some idea of its contents: "The Dairy Journal of New Hampton pours a raking fire into the ranks of the private dairymen and especially singles out Mr. C. L. Gabrilson of that place who is, as all know, secretary of the Iowa Dairy association. The Dairy Journal also attacks the State Dairy association itself for offering any premiums to the makers of dairy butter, or recognizing private dairying in any way. This paper, published at Mr. Gabrilson's Home, is 'astonished that Mr. Gabrilson should see fit to identify himself with that class of the farming community that still clings to the spinning wheel and hand loom, and watch the phases of the moon to know what time to make the family soap, for to this class belongs the farmer who follows private dairying in any locality where there is located a first-class creamery.'"
- 26 Seaman, "Early Iowa Farm Journals," p. 46.
- 27 Dairy Messenger, 1 (Chicago, 1890), 1; Stuntz, List.
- 28 Dairy Messenger, 1 (Chicago, 1890), 1.
- 29 Ibid. (Jan., 1892), p. 1.
- 30 Dairy Messenger, 1 (Chicago, Jan., 1892), 1.
- 31 Ibid.; Monrad wrote histories of the journals of his time in 1892. He often misspelled the names of the editors ("Gabrielson" in the quote on page 105 should be "Gabrilson"), gave incorrect starting dates, or identified the journal with a slightly inaccurate title. Ibid., p. 15.
- 32 Dairy Messenger, 1 (Chicago, Jan., 1892), 1. Stuntz, List, Although New York City would appear to be a strange place to start a dairy farmer journal, L. S. Hardin made the attempt when he brought out his weekly New Dairy in 1890. The journal was not a great success; it failed in 1892; Dairy Messenger, 1 (Chicago, Jan., 1892), 15; Stuntz, List. Another New York experiment which failed was the National Dairyman News, a monthly published between 1892 and 1904; see Stuntz, List.
- 33 National Dairyman, 1 (Kansas City, Jan. 10, 1892), 10; Stuntz, List, is in error on founding date of this journal; on the merger, see Stuntz, List.
- 34 National Dairyman, 1 (Kansas City, Jan. 10, 1892), 10.
- 35 Ibid., p. 10; Stuntz, List.

- 36 Hoard's Dairyman, vol. 20 (Ft. Atkinson, 1889); Jersey Bulletin, vol. 6 (Indianapolis, 1888).
- 37 Otto C. Lightner, The History of Business Depressions (New York, 1922), particularly the chapters "Agriculture and Depressions," pp. 305-24, and "Depression of 1873-75," pp. 160-69; see also Carl C. Taylor, The Farmers' Movement, 1620-1920 (New York, 1953), pp. 94-96; 223-26; 281-87; Solon J. Buck, The Agrarian Crusade (New Haven, 1920), pp. 99-110.
- 38 Taylor, Farmers' Movement, 1620-1920, pp. 172-92.
- 39 Hoard's Dairyman, 19 (Ft. Atkinson, Jan. 4, 1889), 1.
- 40 Shannon, America's Economic Growth, p. 432.
- 41 Dairy Messenger, 1 (Chicago, 1890), 1.
- 42 Ibid. (Jan., 1892), p. 15; Monrad wrote histories of seventeen dairy journals, several of them foreign.
- 43 Thus Jenkins corrected part of a history of the American Jersey Cattle Club. Near the end of the article, the author wrote: "In this light sketch of the career of the Jersey Club it will not do to forget the history of THE JERSEY BULLETIN, which is so closely interwoven with the main action of the story. Shortly after the Club got under healthy headway and while the headquarters were located in Newport, R.I., Col. Waring decided to start a Jersey organ and for this purpose he launched the Monthly Bulletin, and shortly afterwards associated with himself Mr. T. J. Hand as assistant editor. The career of the Bulletin from that day on, as it struggled out of its swaddling cloth, gradually grew to manhood, moved its domicile west and finally gained the full strength of its present magnificent proportions, is the common knowledge of all who take part in advancing and maintaining the superlative excellence of the Jersey breed.
" [The Monthly Bulletin was the property of the Club, or of its officers, and died in June, 1881, because it was absorbing too much of the Club's funds. THE JERSEY BULLETIN was born October 1, 1883. There never was any relation whatever between the Monthly Bulletin and THE JERSEY BULLETIN. Neither the Club nor any of its officers have any interest in THE JERSEY BULLETIN except that of mutual interest in the advancement of the breed.—ed.] " Jersey Bulletin, 11 (Indianapolis, Jan. 13, 1892), 23.
- 44 Creamery Journal, 2 (Waterloo, Aug. 1, 1891), 15; ibid., p. 15; ibid. (Sept., 1891), p. 1.
- 45 Ibid., 3 (Mar. 1, 1892), 9.
- 46 Ibid., 2 (Mar. 1, 1891), 14; on another occasion Kimball attacked the editor of the American Creamery by name when he wrote: "Slocum, of American Creamery notoriety, sends out blanks, (allowing creamerymen to pay postage) asking, among other things, how much the creameryman is paying for his milk or cream, how much it costs to manufacture, and finally, how much the butter sells for per pound. The nerve of this fellow would stop a clock." Ibid., 2 (Aug. 1, 1891), 14.
- 47 National Dairyman, 2 (Kansas City, Sept., 1892), 6.

- 48 Holstein-Friesian Register, 4 (Brattleboro, May 1, 1889), 69; at least Hoard was not felt to favor the Jersey, see the Jersey Bulletin, 4 (Indianapolis, May 26, 1886), 562; for detailed opinion of Hoard see the Jersey Bulletin, 28 (Indianapolis, Jan. 11, 1899), 30. On the other hand, Professor Vernon Carstensen points out that Hoard was the Jersey breeders' candidate for governor in 1888.
- 49 Holstein-Friesian Register, 4 (Brattleboro, Mar. 15, 1899), 21.
- 50 Hoard's Dairyman, 23 (Ft. Atkinson, June 24, 1892), 2312.
- 51 Creamery Journal, 2 (Waterloo, Feb. 1, 1891), 1; Dairy Messenger, 1 (Chicago, Jan., 1892), 10; Hoard's Dairyman, 18 (Ft. Atkinson, 1886), *passim*.
- 52 National Dairyman, 2 (Kansas City, Aug., 1892), 8.
- 53 Seaman, "Early Iowa Farm Journals," p. 56; Dairy Messenger, 1 (Chicago, 1890), 1; Creamery Journal, 2 (Waterloo, Feb. 1, 1891), 3 and 6; American Creamery, 4 (Holly, Mich., Feb. 1, 1891), 2; foreign news, Holstein-Friesian Register, 4 (Brattleboro, Mar. 1, 1891), 3; Hoard's Dairyman, 17 (Ft. Atkinson, May 21, 1886), 4; American Creamery, 4 (Holly, Mich., Jan. 1, 1892), 16.
- 54 Hoard's Dairyman, 17 (Ft. Atkinson, May 21, 1886), 2; Holstein-Friesian Register, 4 (Brattleboro, Mar. 1, 1891), 3.
- 55 Dairy Messenger, 1 (Chicago, Jan., 1892), 19-20; Hoard's Dairyman, 23 (Ft. Atkinson, Apr. 8, 1892), 2143.
- 56 Creamery Journal, 2 (Waterloo, Feb. 1, 1891), 11; the praises of the creamery were sung by the editor of the Hector, Minn., Mirror and were reprinted in the American Creamery, 4 (Holly, Mich., May 1, 1891), 2; in part, it ran:
 "We are going to have a creamery, so say we one and all.
 We would not, if we could, let such a good scheme fall.
 The Farmers will be benefitted, and the merchants, laborers too,
 And all may have good butter, no 'store grease' or 'patent glue.'"
- 57 Hoard's Dairyman, 23 (Ft. Atkinson, Apr. 8, 1892), 2137; Mirror and Farmer, quoted in *ibid.*, 17 (Mar. 5, 1886), 1; Holstein-Friesian Register, 4 (Brattleboro, Nov. 1, 1891), 137; Dairy Messenger, 1 (Chicago, 1891), 8.
- 58 Dairy Messenger, 1 (Chicago, 1890), 8.
- 59 Hoard's Dairyman, 17 (Ft. Atkinson, Mar. 5, 1886), 1.
- 60 Holstein-Friesian Register, 4 (Brattleboro, May 1, 1889), 71; another general-purpose advocate, significantly enough, from Iowa, complained of the dairy-purpose advocates that "They draw pathetic pictures of the dear public having to eat the 'old cow beef after the animal has been used 15 years as a profitless dairy cow.' The man too 'who bought the heavy hoe for work in the garden, so he would have a few more pounds of old iron to sell when it was worn out,' is another chestnut that should be worn out by this time, but no, they appear with surprising regularity." *Ibid.* (Mar. 1, 1889), p. 374.
- 61 *Ibid.* (Mar. 15, 1889), pp. 23-28.

- 62 Jersey Bulletin, 4 (Indianapolis, Feb. 24, 1886), 353.
- 63 Ibid., 6 (Jan. 5, 1887), 4-5.
- 64 Hoard's Dairyman, 17 (Ft. Atkinson, Jan. 14, 1887), 1; Dairy Messenger, 1 (Chicago, 1890), 5; Hoard's Dairyman, 23 (Ft. Atkinson, June 24, 1892), 2312.
- 65 Prior to the invention of the Babcock test, cattle were tested by weighing the milk. In 1887 a correspondent of the Jersey Bulletin said of cow testing: "My object in making this statement is not to advertise as I have no stock for sale, but to try to convince the reader that testing the per cent of his cow or cow's milk will result in good, as he will better understand the value of his cows and learn from which ones it is to his interest to breed." Jersey Bulletin, 6 (Indianapolis, June 15, 1887), 386. Hoard was more vehement: "This is the situation of a majority of the farmers in the Northwest. They do not know whether they are milking and feeding a cow at a profit or a loss. There is no use trying to make a correct guess of what your cows are doing, for you can't do it. Profitable dairying is not founded on guess work...." Hoard's Dairyman, 19 (Ft. Atkinson, Mar., 1888), 1.
- 66 Jersey Bulletin, 4 (Indianapolis, June 15, 1887), 384; ibid. (June 22, 1887), p. 407.
- 67 Quoted in the Holstein-Friesian Register, 4 (Brattleboro, Feb. 15, 1890), 370.
- 68 Holstein-Friesian Register, 4 (Brattleboro, Feb. 15, 1890), 370.
- 69 American Creamery, 4 (Holly, Feb. 1, 1891), 2. As early as 1892 there was evidence of trouble among Holstein breeders. The big blow to the Holstein men came when no Holsteins were entered in the Columbian Exposition contest. For evidence of a change of attitude and new lack of confidence on the part of Holstein breeders see Holstein-Friesian Register, 6 (Boston, Feb. 15, 1892), 226. Dissensions within the Holstein-Friesian Association seemed to cause the difficulty, although Jenkins, of course, interpreted the trouble differently. Speaking of Holstein breeders, he gleefully asserted that "Uninterrupted failure and unvarying defeat have taught them prudence and discretion." Jersey Bulletin, 11 (Indianapolis, Mar. 9, 1892), 149. See Chapter 6 for more details on the Columbian Exposition.
- 70 American Creamery, 14 (Holly, Mich., Feb. 1, 1891), 4.
- 71 Jersey Bulletin, 4 (Indianapolis, Feb. 24, 1886), 352; ibid. (Indianapolis, Jan. 5, 1887), pp. 10-11; Hoard's Dairyman, 23 (Fort Atkinson, Dec. 16, 1892), 2713; ibid., p. 2712; Jersey Bulletin, 6 (Indianapolis, June 29, 1887), 418; American Creamery, 4 (Holly, Feb. 1, 1891), 4.
- 72 Jersey Bulletin, 6 (Indianapolis, June 29, 1887), 418; American Creamery, 4 (Holly, Feb. 1, 1891), 4; Jersey Bulletin, 11 (Chicago, Nov. 2, 1892), 724; Dairy Messenger, 1 (Chicago, Jan., 1892), 3.
- 73 Hoard's Dairyman, 17 (Ft. Atkinson, May 28, 1886), 1.
- 74 Creamery Journal, 3 (Waterloo, Mar. 1, 1892), 1 and 4-5;

- American Creamery, 4 (Holly, Sept. 15, 1891), 1.
- 75 Creamery Journal, 2 (Waterloo, Jan., 1892), 14; ibid. (Apr., 1891), p. 1; Dairy Messenger, 1 (Chicago, 1890), 1.
- 76 Creamery Journal, 2 (Waterloo, Apr., 1891), 1.
- 77 Ibid., p. 14.
- 78 American Creamery, 4 (Holly, Sept. 15, 1891), 1.
- 79 Creamery Journal, 2 (Waterloo, Apr. 1, 1891), 1; ibid. (Aug., 1891), p. 16; Hoard's Dairyman, 23 (Ft. Atkinson, Apr. 15, 1892), 2153.
- 80 Creamery Journal, 2 (Waterloo, Apr. 1, 1891), 1.
- 81 New Dairy, quoted in the Creamery Journal, 2 (Waterloo, Aug., 1891), 16.
- 82 Ibid.
- 83 American Dairyman, quoted in Holstein-Friesian Register, 4 (Brattleboro, Nov. 1, 1891), 137.
- 84 American Creamery, 4 (Holly, Feb. 1, 1892), 8.
- 85 Jersey Bulletin, 11 (Indianapolis, Apr. 6, 1892), 219.
- 86 Quoted in the Jersey Bulletin, 11 (Indianapolis, Apr. 6, 1892), 216.
- 87 See below, for a further discussion of Jenkins and the Babcock test.
- 88 Jersey Bulletin, 11 (Indianapolis, Jan. 6, 1892), 7.
- 89 Ibid. (Apr. 6, 1892), p. 218.
- 90 Hoard's Dairyman, 23 (Ft. Atkinson, June 10, 1892), 2284.
- 91 Jersey Bulletin, 11 (Indianapolis, Jan. 6, 1892), 6.
- 92 Ibid. (Chicago, Nov. 23, 1892), 769.
- 93 Ibid., p. 771.
- 94 National Dairyman, 1 (Kansas City, Mar. 10, 1892), 3.
- 95 Quoted in the Dairy Messenger, 1 (Chicago, 1890), 3.
- 96 Hoard's Dairyman, 23 (Ft. Atkinson, Oct. 7, 1892), 2554.
- 97 National Live Stock Journal, quoted in Hoard's Dairyman, 17 (Ft. Atkinson, Dec. 31, 1886), 2.
- 98 Jersey Bulletin, 6 (Indianapolis, May 4, 1887), 286, quoted from the National Stockman.
- 99 Creamery Journal, 2 (Waterloo, Sept. 1, 1891), 1.
- 100 American Creamery, 4 (Holly, Feb. 1, 1891), 2; Hoard's Dairyman, 17 (Ft. Atkinson, Dec. 31, 1886), 1; American Creamery, 4 (Holly, Sept. 15, 1891), 9.
- 101 From a circular of Professor Fagersten, analytical chemist of Chicago, quoted in Colman's Rural World and reprinted in the American Creamery, 4 (Holly, Nov. 19, 1891), 9.
- 102 National Dairyman, 1 (Kansas City, Mar. 10, 1892), 6; Hoard's Dairyman, 23 (Ft. Atkinson, Apr. 8, 1892), 2136.
- 103 American Creamery, 4 (Holly, Feb. 1, 1891), 2; Creamery Journal, 2 (Waterloo, May, 1891), 14.
- 104 Hoard's Dairyman, 17 (Ft. Atkinson, Jan. 14, 1887), 1; Jersey Bulletin, 4 (Indianapolis, Feb. 24, 1886), 351.
- 105 Hoard's Dairyman, 19 (Ft. Atkinson, Jan. 4, 1889), 1; Creamery Journal, 2 (Waterloo, Sept., 1891), 12.
- 106 Jersey Bulletin quoted in the Creamery Journal, 2 (Waterloo, May, 1891), 10; ibid., 3 (July, 1892), 7.

- 107 Jersey Bulletin, 6 (June 15, 1887), 391; ibid. 11 (Indianapolis, Jan. 20, 1892), 41-42; Shannon, Farmer's Last Frontier, p. 138. Alvord, "Dairy Development," Yearbook of Agriculture, 1899, pp. 393-95.
- 108 National Dairyman, 1 (Kansas City, Mar. 10, 1892), 2.
- 109 Creamery Journal, 2 (Waterloo, May, 1891), 14; ibid., 2 (Jan., 1892), 6; Jersey Bulletin, 11 (Indianapolis, June 22, 1892), 409-10.
- 110 Jersey Bulletin, 11 (Indianapolis, June 22, 1892), 409-10.
- 111 National Dairyman, 1 (Kansas City, Mar. 10, 1892), 8.
- 112 Jersey Bulletin, 11 (Indianapolis, Nov. 23, 1892), 772.
- 113 Ibid., 4 (Feb. 24, 1886), 352; ibid., 11 (Mar. 9, 1892), 150; ibid., (Nov. 23, 1892) p. 770.
- 114 Ibid., 6 (Jan. 5, 1887), 4.
- 115 American Creamery, 4 (Holly, May 1, 1891), 4.
- 116 Hoard's Dairyman, 23 (Ft. Atkinson, Apr. 8, 1892), 2136; ibid., p. 2138; ibid., (Oct. 14, 1892), p. 2568; ibid., (Dec. 16, 1892), p. 2712.

Chapter 6

- 1 Lightner, Business Depressions, chapter on depression of 1893; Shannon, America's Economic Growth, pp. 414-15.
- 2 Stuntz, List.
- 3 Practical Dairyman and Agriculturist, 4 (Chatham, N.Y., Jan., 1896), 8.
- 4 Ibid., vol. 5 (July, 1897).
- 5 Ibid., 6 (Aug., 1898), 8; Practical Dairyman, 6 (New York, Sept., 1898), 8.
- 6 Practical Dairyman, 6 (Sept., 1898) 8; Stuntz is not altogether accurate in regard to this journal.
- 7 Practical Dairyman and American Stockman, 7 (New York, Nov., 1899), 12; ibid., vol. 8 (Indianapolis, Nov., 1900).
- 8 Stuntz, List; Blooded Stock, 14 (Oxford, Pa., Nov., 1908), 3; ibid., vol. 17 (May, 1911); Union List of Serials.
- 9 Guernsey Breeders' Journal, 84 (Peterboro, N.H., Mar. 15, 1952), 781.
- 10 Pacific Coast Dairyman, vol. 1 (Tacoma, Wash., 1895).
- 11 Ibid., p. 4.
- 12 Stuntz, List.
- 13 Northwest Horticulturist, Agriculturist, and Dairyman, vol. 8 (Tacoma, Wash., 1895); Northwest Horticulturist and Dairyman, vol. 26 (Tacoma, Wash., Apr., 1913).
- 14 Northwest Horticulturist, Agriculturist, and Dairyman, vol. 8 (Tacoma, 1895); ibid., vol. 12 (Tacoma, 1899).
- 15 Chicago Markets, 1 (Chicago, June 9, 1894), 1.
- 16 Chicago Produce, 1 (Chicago, Apr. 20, 1895), 2; ibid., (June 16, 1894), p. 1; Stuntz, List.
- 17 Stuntz, List; Chicago Dairy Produce, vol. 34 (Chicago, Oct. 11, 1927); Dairy Produce, vol. 49 (Chicago, May, 1942).
- 18 Chicago Produce, 1 (Chicago, Apr. 20, 1895), 2.
- 19 The editor probably refers to the Dairy World and the American

- Creamery. See Chapters 3 and 5 for histories of these journals.
- 20 Ayer's Newspaper Annual, 1898, p. 577; cf., Stuntz, List; New York Produce Review and American Creamery, vol. 7 (New York, Nov. 9, 1898).
 - 21 American Creamery and Poultry Produce Review, 70 (New York, May 7, 1930), 4; American Produce Review, 84 (New York, Oct. 13, 1937), 802; *ibid.*, 89 (Dec. 27, 1939), 250.
 - 22 Milk News, 1 (Chicago, Oct. 19, 1895), 2.
 - 23 *Ibid.*, (Feb. 17, 1896), p. 5.
 - 24 *Ibid.*, 14 (June 10, 1907), 4.
 - 25 Union List of Serials.
 - 26 Stuntz, List; Seaman, "Early Iowa Farm Journals," p. 11.
 - 27 Creamery Gazette, vol. 21 (Des Moines, July 15, 1896); the contents of this issue indicate that it was not the first number printed. The volume numbers are of no help in establishing a chronology since the volume for 1896 was number XXI. Perhaps this was the volume number for the Iowa Farmer and Breeder of Cedar Rapids which Wallace had purchased earlier and moved to Ames. See also, Seaman, "Early Iowa Farm Journals," p. 11; Union List of Serials.
 - 28 Creamery Gazette, vol. 21 (Des Moines, July 15, 1896); Seaman, "Early Iowa Farm Journals," p. 11; Stuntz, List.
 - 29 American Creamery, 6 (Chicago, Aug., 1893), 5.
 - 30 A History of the World's Columbian Exposition Held in Chicago in 1893, ed. Rossiter Johnson (New York, 1898), III, 31-32.
 - 31 *Ibid.*
 - 32 Creamery Journal, 4 (Waterloo, June 15, 1893), 10; American Creamery, 6 (Chicago, May, 1893), 14; National Dairyman, 2 (Kansas City, Aug., 1892), 7.
 - 33 American Creamery, 6 (Chicago, May, 1893), 14.
 - 34 *Ibid.* (July, 1893), 16.
 - 35 *Ibid.*
 - 36 Creamery Journal, 4 (Waterloo, July 1, 1893), 3; for charges of corruption see, American Creamery, 6 (Chicago, July, 1893), 16.
 - 37 Creamery Journal, 4 (Waterloo, Oct. 1, 1893), 1.
 - 38 Dairy Messenger, 1 (Chicago, Oct., 1892), 213.
 - 39 Hoard's Dairyman, 24 (Ft. Atkinson, Nov. 24, 1893), 638.
 - 40 Creamery Journal, 4 (Waterloo, June 1, 1893), 13; Dairy Messenger, 1 (Chicago, Oct., 1893), 218.
 - 41 Dairy Messenger, 1 (Chicago, Oct., 1893), 218.
 - 42 Holstein-Friesian Register, 6 (Boston, Feb. 15, 1892), 226; *ibid.*, 7 (Boston, Dec. 1, 1892), 222; *ibid.*, (Dec. 15, 1892), p. 235; *ibid.*, p. 7, *passim*; Hoard's Dairyman, 23 (Ft. Atkinson, Jan. 20, 1893), 2792; *ibid.*, (July 22, 1892), p. 2380.
 - 43 Columbian Exposition, III, 28.
 - 44 *Ibid.*, pp. 28-29.
 - 45 Jersey Bulletin, 12 (Chicago, June 21, 1893), 450; *ibid.*, (May 3, 1893), p. 310.
 - 46 *Ibid.* (June 21, 1893), p. 450.
 - 47 Hoard's Dairyman, 24 (Ft. Atkinson, June 16, 1893), 266.

- 48 Ibid., p. 270; ibid., (July 7, 1893), p. 314; ibid., (Nov. 17, 1893), p. 622.
- 49 Creamery Journal, 4 (Waterloo, July 1, 1893), 3.
- 50 American Creamery, 6 (Chicago, July, 1893), 16; Creamery Journal, 4 (Waterloo, July, 1893), 3; American Creamery, 6 (Chicago, July 1893), 16; National Dairyman, 3 (Kansas City, Sept., 1893), 5.
- 51 National Dairyman, 3 (Kansas City, Sept., 1893), 5.
- 52 Jersey Bulletin, 12 (Chicago, Oct. 25, 1893), 753.
- 53 Hoard's Dairyman, 24 (Ft. Atkinson, Nov. 17, 1893), 626; see also Jersey Bulletin, vol. 12 (Chicago, 1893).
- 54 Practical Dairyman and Agriculturist, 6 (Chatham, Feb., 1898), 3, as one example of the trend.
- 55 Dairy Messenger, 1 (Chicago, Oct., 1893), 216.
- 56 Creamery Journal, 4 (Waterloo, Oct. 1, 1893), 6.
- 57 American Creamery, 7 (Chicago, Dec., 1893), 7; Creamery Journal, 4 (Waterloo, Jan. 1, 1894), 3.
- 58 American Creamery, 6 (Chicago, Sept., 1893), 7; Creamery Journal, 4 (Waterloo, Oct. 1, 1893), 10.
- 59 Creamery Journal, 4 (Waterloo, Oct. 1, 1893), 10.
- 60 Ibid.
- 61 American Creamery, 7 (Chicago, July, 1894), 11.
- 62 Milk News, 1 (Chicago, Oct. 19, 1895), 1.
- 63 American Creamery, 6 (Chicago, July, 1893), 4.
- 64 National Dairyman, 4 (Kansas City, July, 1894), 167.
- 65 Chicago Produce, 1 (Chicago, Apr. 20, 1895), 5; ibid. (Sept. 29, 1894), p. 4.
- 66 Dairy World, 14 (Chicago, Feb., 1894), 5.
- 67 Milk News, 1 (Chicago, Oct. 19, 1895), 3; National Dairyman, 4 (Kansas City, Mar., 1894), 33-35; Pacific Coast Dairyman, 1 (Tacoma, Aug. 1, 1896), 230.
- 68 Chicago Produce, 1 (Chicago, Oct. 6, 1894), 8.
- 69 Jersey Bulletin, 12 (Chicago, May 3, 1893), 304.
- 70 Chicago Produce, 1 (Chicago, June 16, 1894), 4.
- 71 Ibid.
- 72 Creamery Journal, 4 (Waterloo, June 1, 1893), 12; Dairy World, 14 (Chicago, Feb., 1894), 8; Pacific Coast Dairyman, 1 (Tacoma, Nov. 15, 1895), 30; Chicago Produce, 1 (Chicago, Sept. 29, 1894), 2.
- 73 Jersey Bulletin, 12 (Chicago, Apr. 26, 1893), 284.
- 74 Ibid. (June 28, 1893), p. 465.
- 75 American Creamery, 6 (Chicago, Sept., 1893), 6; Pacific Coast Dairyman, 1 (Tacoma, Nov. 1, 1895), 8.
- 76 National Dairyman, 4 (Kansas City, Mar., 1894), 40.
- 77 Milk News, 1 (Chicago, Oct. 19, 1895), 6.
- 78 Dairy World, 14 (Chicago, Feb., 1894), 4.
- 79 Ibid.
- 80 National Dairyman, 4 (Kansas City, Mar., 1894), 45.
- 81 National Dairyman, 4 (Kansas City, Mar., 1894), 39.
- 82 Nothing critical of the Babcock test was printed in the Jersey Bulletin for the first half of 1893 (vol. 12) and very little there-

- after. The editor was too concerned about the Columbian Exposition. Chicago Produce, 1 (Chicago, May 25, 1895), 12.
- 83 Jersey Bulletin, 12 (Chicago, Apr. 26, 1893), 290; Dairy Messenger, 1 (Chicago, Oct., 1893), 216-17 for the quotation.
- 84 Chicago Markets, 1 (Chicago, June 9, 1894), 7. Frozen butter naturally led to an investigation of other aspects of preserving dairy products. Technological advances particularly interested the editors. As BurrIDGE observed in 1893: "Mechanical refrigeration is bound to entirely change the dairy industry of this country, in so far as it relates to butter, unless signs fail. Frozen butter has held up so well and has given so good satisfaction to the consumer, that it is bound to supercede old ways." American Creamery, 6 (Chicago, July, 1893), 1. On the other hand, Monrad of the Dairy Messenger pointed out that ice was still important because "... the butter often requires a cooling which cannot be effected without ice. Every creamery and dairy should therefore have an ice house and a refrigerator." Dairy Messenger, 1 (Chicago, Oct., 1893), 224-34.
- 85 Chicago Produce, 1 (Chicago, Apr. 20, 1895), 7.
- 86 On cleanliness and butter making techniques see, Chicago Produce, 1 (Chicago, May 18, 1895), 2; American Creamery, 7 (Chicago, Dec., 1893), 6; Dairy Messenger, 1 (Chicago, Oct., 1893), 213; *ibid.*, all issues of 1893; on mottles see, Chicago Markets, 1 (Chicago, June 9, 1894), 4.
- 87 Creamery Journal, 4 (Waterloo, June 15, 1893), 10.
- 88 *Ibid.*
- 89 Creamery Gazette, 21 (Des Moines, Jan. 15, 1893), 10.
- 90 American Creamery, 7 (Chicago, May 18, 1895), 2; Chicago Produce, 1 (Chicago, May 18, 1895), 2.
- 91 American Creamery, 6 (Chicago, May, 1893), 14; Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 8.
- 92 Milk News, 1 (Chicago, Feb. 17, 1896), 4.
- 93 Dairy World, 14 (Chicago, Aug., 1894), 11. Knight of Chicago Markets approached the subject of Elgin with a certain delicacy: "There is nothing to fight over. Chicago is perfectly willing that the Elgin Board shall continue to do business at the old stand as long as it can reconcile public sentiment to its actions. But Chicago will simply refuse to support the manipulations of this suburban point by making purchases of butter upon basis of sales at that point...." Chicago Markets, 1 (Chicago, June 9, 1894), 4.
- 94 Chicago Markets, 1 (Chicago, June 9, 1894), 2; Chicago Produce, 1 (Chicago, Mar. 30, 1895), 2; *ibid.* (Apr. 20, 1895), p. 5.
- 95 National Dairyman, 4 (Kansas City, Jan., 1894), 5; Dairy World, 14 (Chicago, Aug., 1894), 4.
- 96 National Dairyman, 4 (Kansas City, Jan., 1894), 5; Dairy World, 14 (Chicago, Aug., 1894), 4.
- 97 National Dairyman, 4 (Kansas City, June, 1894), 149.
- 98 *Ibid.*
- 99 *Ibid.*

Chapter 7

- 1 St. Paul Dairy Reporter, 1 (St. Paul, June, 1897), 2; ibid. (Feb. 8, 1898), p. 164; Stuntz, List.
- 2 St. Paul Dairy Reporter, 1 (St. Paul, Feb. 8, 1898), 164; Dairy Reporter, 3 (St. Paul, Dec. 26, 1899), 500.
- 3 Stuntz, List.
- 4 Northwestern Creamery Journal, 1 (Minneapolis, Sept., 1898), 10.
- 5 Stuntz, List; Kimball, for example, immediately attacked the publication and incidentally slurred Wallace's Creamery Gazette. Kimball wrote in October, 1898:

"The paper which has been named the Northwestern Creamery Journal made its appearance September 1. It is gotten up after the style of THE CREAMERY JOURNAL, but almost too far after. Its name indicates that the original intention of the publisher, to print a paper as near like this one as possible, had not been abandoned September 1.

.....

"THE CREAMERY JOURNAL isn't much put out about it, because its reputation is established, and it has always been able to look after its own interests against all comers, but there is no doubt that the name of this paper, though not copyrighted, has become our property through continued usage, and common law would protect us if we appealed to the courts. We are informed, however, that the publishers are getting up a new head, and that it will read 'The Northwestern Creamery Gazette.' As there is no other publication of this name representing the dairy industry, it is likely that the 'change will do them good.'" Creamery Journal, 9 (Waterloo, Oct., 1898), 10. The change, however, was not made.

- 6 Kansas Dairyman, 1 (Eureka, Feb., 1898), 1.
- 7 Ibid.; Stuntz, List.
- 8 Jensen's Dairyman, 1 (Beloit, Kan., Oct., 1898), 1; ibid., p. 2; ibid., 2 (Mar., 1900), 1.
- 9 Ibid., 2 (Beloit, Mar., 1900), 1. This judgment is based partly on the place of publication and partly on the motto of the two papers: "'Muscle to Win Must Be Lubricated With Brains.'"—F. D. Coburn." Ibid., 2 (Beloit, Mar., 1900), 1; see first page of any issue; also see any issue of Dairy Age. In 1898 there was an attempt to begin a semimonthly dairy paper in Starkville, Mississippi. Like several succeeding journals, the paper was titled Southern Dairyman. It died in 1899. See Stuntz, List.
- 10 Kansas Dairy Farmer, 1 (Enterprise, Oct., 1899), 6.
- 11 Ibid. (Dec., 1899), p. 8.
- 12 Ibid. (Feb., 1900).
- 13 Dairy Age, 1 (Beloit, Kan., Apr., 1900), 4.
- 14 Ibid., p. 4; ibid., 2 (Sept., 1901), 8; ibid., 3 (Apr., 1902), 4; Stuntz, List. In addition to the rather clear statements of the editors of the new periodicals regarding the status of dairying

in Kansas, tables of the number of dairy cattle compared to neat cattle in Kansas indicate a rise and then decline in dairying between 1880 and 1900.

	<u>1880</u>	<u>1890</u>	<u>1900</u>
Neat cattle	1,114,800	2,446,247	2,891,160
Dairy cattle	418,333	741,786	676,456

The drop in the number of dairy cattle is large enough to be significant, but just as importantly, the number of neat cattle increased remarkably between 1890 and 1900. This represented a relative decline for dairying. Few other states approached this decline. In most instances the number of dairy cattle steadily increased between 1880 and 1900. Based on U.S. Census, 1900, vol. V: Agriculture (Washington, D.C., 1902), pp. 704-5.

- 15 Nebraska Dairyman and Up-To-Date Farmer, 3 (Lincoln, Aug., 1899), 8; see also Stuntz, List.
- 16 Nebraska Dairyman, vol. 12 (Lincoln, Oct., 1908); ibid. (July, 1909); ibid. (Oct., 1909); Stuntz, List.
- 17 Dairy and Creamery, vol. 1 (Chicago, May 15, 1899); ibid. (Dec. 15, 1899), p. 8; Stuntz, List.
- 18 Dairy Record, 25 (St. Paul, June 18, 1924), 14.
- 19 Ibid., pp. 14, 44.
- 20 Ibid., p. 45.
- 21 Ibid. (Aug. 9, 1922), p. 23; see also Ayer's Directory of Newspapers and Periodicals, 1950.
- 22 A less fortunate venture was the Farmer and Dairyman, a semi-monthly of Holton, Georgia, which began and ended in 1900; Stuntz List.
- 23 Pacific Dairy Review, 55 (San Francisco, June, 1951), 26; Stuntz, List; Pacific Dairy Review, 55 (San Francisco, June, 1951), 30.
- 24 Pacific Dairy Review, 11 (San Francisco, Jan. 31, 1907), 2; ibid., 55 (June, 1951), 30, 32; ibid., pp. 32, 34; Stuntz, List.
- 25 Hoard's Dairyman, 27 (Ft. Atkinson, Sept. 4, 1896), 569; ibid. (Feb. 28, 1896), p. 24; ibid. (Jan. 8, 1897), p. 927.
- 26 Elgin Dairy Report, 6 (Elgin, Aug. 3, 1896), 2; Hoard's Dairyman, 27 (Ft. Atkinson, Mar. 13, 1896), 74.
- 27 Creamery Journal, 6 (Waterloo, Jan. 1, 1896), 14; Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 6.
- 28 Pacific Coast Dairyman, 1 (Tacoma, Mar. 1, 1896), 105; Hoard's Dairyman, 27 (Ft. Atkinson, Mar. 6, 1896), 54.
- 29 Elgin Dairy Report, vol. 6 (Elgin, July 27, 1896); Hoard's Dairyman, 27 (Ft. Atkinson, Apr. 17, 1896), 171; Creamery Journal, 6 (Waterloo, Sept. 1, 1896), 14; American Creamery, 8 (Chicago, Jan. 6, 1896), 725.
- 30 On general legislation and ways of obtaining it, see the Creamery Gazette, 21 (Des Moines, July 15, 1896), 12; quotation from the Creamery Journal, 6 (Waterloo, Sept. 1, 1896), 16.
- 31 Elgin Dairy Report, 6 (Elgin, Aug. 3, 1896), 2.
- 32 Holstein-Friesian Register, 11 (Brattleboro, May, 1896), 5-8;

- Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 12; Hoard's Dairyman, 27 (Ft. Atkinson, Feb. 28, 1896), 23; ibid. (Mar. 13, 1896), 64; also see the breed journals.
- 33 Hoard's Dairyman, 27 (Ft. Atkinson, Apr. 17, 1896), 176; also see above, Chapter 1.
- 34 Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 1, 3; ibid., pp. 2-3; Pacific Coast Dairyman, 1 (Tacoma, Nov. 1, 1895), 9.
- 35 Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 2, 3; Pacific Coast Dairyman, 1 (Tacoma, Nov. 1, 1895), 9.
- 36 Hoard's Dairyman, 27 (Ft. Atkinson, Mar. 13, 1896), 64-67.
- 37 Jersey Bulletin, 18 (Indianapolis, Sept., 1899), 830-31; Hoard's Dairyman, 31 (Ft. Atkinson, Jan. 18, 1901), 975; Nebraska Dairyman, vol. 8 (Lincoln, Aug., 1904); Dairy and Creamery, 3 (Chicago, June 1, 1901), 7; Hoard's Dairyman, 29 (Ft. Atkinson, Apr. 1, 1898), 145.
- 38 Dairy Age, 1 (Beloit, June, 1900), 10.
- 39 Hoard's Dairyman, 27 (Apr. 17, 1896), 164; Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 3; Pacific Coast Dairyman, 1 (Tacoma, Feb. 15, 1896), 103.
- 40 Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 11.
- 41 Ibid.
- 42 Hoard's Dairyman, 27 (Ft. Atkinson, Sept. 4, 1896), 569.
- 43 Chicago Produce, 5 (Chicago, June 4, 1898), 18.
- 44 Hoard's Dairyman, 27 (Ft. Atkinson, Feb. 28, 1896), 25.
- 45 Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 1, 5; Milk News, 1 (Chicago, Feb. 17, 1896), 5-6.
- 46 Creamery Journal, 8 (Waterloo, May, 1898), 14-15; Hoard's Dairyman, 29 (Ft. Atkinson, May 27, 1898), 307; Jersey Bulletin, 18 (Indianapolis, Oct. 4, 1899), 851; ibid. (June 14, 1899), p. 488.
- 47 Nebraska Dairyman, 3 (Lincoln, Aug., 1899), 8.
- 48 Hoard's Dairyman, vol. 31 (Ft. Atkinson, Feb. 6, 1900); ibid. (Jan. 18, 1901), p. 982.
- 49 Creamery Gazette, 21 (Des Moines, July, 1896), 1.
- 50 Tillamook Headlight, quoted in the Pacific Coast Dairyman, 1 (Tacoma, May 15, 1896), 172.
- 51 Chicago Dairy Produce, 5 (Chicago, Dec. 3, 1898), 2.
- 52 Ibid.
- 53 Creamery Gazette, 21 (Des Moines, July, 1896), 1; Creamery Journal, 6 (Waterloo, May 1, 1896), 14; Hoard's Dairyman, 27 (Ft. Atkinson, Apr. 17, 1896), 168; Creamery Journal, 6 (Waterloo, May 1, 1896), 14.
- 54 Hoard's Dairyman, 27 (Ft. Atkinson, Apr. 17, 1896), 168. At the same time the generally low value of dairy products was demonstrated by the advice of one periodical that skim milk be used as a fertilizer. Hoard was concerned about the waste of skim milk and the continued presence of mottles in butter. He also pointed out that low quality products could not be sold at all, except as grease. Creamery Journal, 6 (Waterloo, May 1,

- 1896), 15; Hoard's Dairyman, 27 (Ft. Atkinson, Mar. 6, 1896), 53; ibid. (Mar. 13, 1896), pp. 64, 71.
- 55 Creamery Gazette, 22 (Des Moines, Sept. 15, 1899), 1, 5; Chicago Dairy Produce, 5 (Chicago, May 14, 1899), 2; North-western Creamery Journal, 3 (Minneapolis, Nov. 10, 1899), 8.
- 56 Creamery Gazette, 22 (Des Moines, Mar. 15, 1897), 5.
- 57 See above, Chapter 1; Hoard's Dairyman, 31 (Ft. Atkinson, June 29, 1900), 395; ibid., 29 (July 22, 1898), 471.
- 58 Creamery Gazette, 22 (Des Moines, Mar. 15, 1897), 3; Kansas Dairyman, 1 (Eureka, Aug., 1898), 1; Chicago Dairy Produce, 5 (Chicago, Dec. 4, 1898), 2; Dairy Reporter, 3 (St. Paul, Dec. 26, 1899), 500; Creamery Journal, 9 (Waterloo, May 1, 1898), 15; Hoard's Dairyman, 31 (Ft. Atkinson, May 4, 1900), 235; Practical Dairyman and American Stockman, 8 (New York, Aug., 1900), 1.
- 59 Elgin Dairy Report, 7 (Elgin, Jan. 31, 1898), 2; Elgin Dairy Report, 8 (Elgin, May 15, 1899), 2; Dairy and Creamery, 1 (Chicago, Dec. 15, 1899), 9; St. Paul Dairy Reporter, 1 (St. Paul, Aug. 24, 1897), 2; Chicago Produce, 5 (Chicago, June 4, 1898), 8.
- 60 Hoard's Dairyman, 31 (Ft. Atkinson, Apr. 27, 1900), 216; Dairy Age, 1 (Beloit, June, 1900), 8; ibid. (Apr., 1900), p. 8.
- 61 Creamery Gazette, 21 (Des Moines, Jan. 15, 1896), 1; Hoard's Dairyman, 27 (Ft. Atkinson, Mar. 13, 1896), 64; Practical Dairyman and Agriculturist, 4 (Chatham, Jan., 1896), 4.
- 62 Creamery Journal, 9 (Waterloo, Jan., 1898), 14.
- 63 ibid., 8 (June 10, 1898), 15; Nebraska Dairyman, 4 (Lincoln, May, 1901), 1. Another common practice in the West was the use of starter culture in butter. This technique was perhaps related to the losses which the editors asserted were due to faulty railroad refrigeration. There was probably some connection, since sweet cream butter did not spoil readily. Dairy and Creamery, 1 (Chicago, May 15, 1899), 2; ibid. (Aug., 1899), p. 3; New York Produce Review and American Creamery, 12 (New York, May 8, 1901), 4. Other papers of the period also made some interesting observations on railroads which may indicate that the roads were in public disfavor, even if not always guilty as charged. As Willson, the former Bryan supporter, put it: "Across the continent for one dollar is declared to be possible when the Government owns and operates the great railroad lines. F. G. R. Gordon contributes an interesting article on this subject to the April number of Chicago's lively reform magazine, The New Time. A history of what other countries have done in public ownership of railways contains valuable information on this popular subject." Elgin Dairy Report, 7 (Elgin, Apr. 4, 1898), 6. Even the East had cause for complaint, as the New York Produce Review and American Creamery, 12 (New York, June 26, 1901), 2, remarked:

"We have had occasion frequently to call attention to the careless handling of shipments of butter by some of the fast freight lines, and while there are evidences of improvement on some

of the lines we still find ample ground for the most serious complaint.

"The other day we were shown a small shipment that had just come to the store from one of the receiving depots, and notwithstanding the fact that the buttermaker had used six tins on every tub in order to protect the covers, nearly one-half of the rims were broken and the tubs looked as if they had been most roughly handled."

The editor then advised shippers not to patronize careless roads.

- 64 Northwestern Creamery Journal, 1 (Minneapolis, Oct., 1898), 1; Nebraska Dairyman, 8 (Lincoln, Aug., 1904), 12; ibid., 3 (Aug., 1899), 9; Kansas Dairy Farmer, 1 (Enterprise, Dec., 1899), 2-5, 22-24.
- 65 Northwestern Creamery Journal, 1 (Minneapolis, Oct., 1899), 11.
- 66 Ibid.
- 67 Dairy Age, 1 (Beloit, Apr., 1900), 4.
- 68 Dairy and Creamery, 1 (Chicago, Dec. 15, 1899), 8.
- 69 Nebraska Dairyman, 1 (Lincoln, Dec. 15, 1899), 8.
- 70 Kansas Dairy Farmer, 1 (Enterprise, Nov., 1899), 8; Dairy and Creamery, 1 (Chicago, May 15, 1899), 3; ibid., 3 (June 1, 1901), 7; Jensen's Dairyman, 1 (Beloit, Oct., 1898), 2; Chicago Dairy Produce, 5 (Chicago, Nov. 26, 1898), 8.
- 71 Quoted in Elgin Dairy Report, 6 (Elgin, Feb. 1, 1897), 2; ibid., 7 (Sept. 6, 1897) 2.
- 72 Ibid., 7 (Sept. 27, 1897), 2; ibid. (Jan. 4, 1897), p. 2.
- 73 Creamery Gazette, 22 (Des Moines, Mar. 15, 1897), 7.
- 74 Creamery Journal, 9 (Waterloo, Aug., 1898), 11; Hoard's Dairyman, 29 (Ft. Atkinson, Sept. 23, 1898), 648.
- 75 Creamery Journal, 9 (Waterloo, Oct., 1898), 14.
- 76 New York Produce Review and American Creamery, 12 (New York, Mar. 15, 1899), 8; Nebraska Dairyman, 4 (Lincoln, May, 1901), 5.
- 77 St. Paul Dairy Reporter, 1 (St. Paul, June 15, 1897), 1; ibid. (Feb. 8, 1898), p. 14.
- 78 Jensen's Dairyman, 1 (Beloit, Nov., 1898), 1; St. Paul Dairy Reporter, 3 (St. Paul, May 30, 1899), 20; Dairy and Creamery, 1 (Chicago, May 15, 1899), 14.
- 79 Dairy and Creamery, 1 (Chicago, May 15, 1899), 7; St. Paul Dairy Reporter, 3 (St. Paul, May 30, 1899), 21; ibid. (May 30, 1899), p. 20; Elgin Dairy Report, 7 (Elgin, May 2, 1898), 2; New York Produce Review and American Creamery, 7 (New York, May 3, 1899), 20; Elgin Dairy Report, 8 (Elgin, May 1, 1899), 1; Dairy Reporter, 3 (St. Paul, Jan. 9, 1900), 536.
- 80 Jersey Bulletin, 18 (Indianapolis, Apr. 12, 1899), 295; Creamery Gazette, 22 (Des Moines, Mar. 15, 1897), 1; New York Produce Review and American Creamery, 12 (New York, Sept. 11, 1901), 2.
- 81 Jersey Bulletin, 18 (Indianapolis, Apr. 12, 1899), 295.
- 82 Elgin Dairy Report, 6 (Elgin, Jan. 4, 1897), 6; example of a

- regular column, "Curds and Whey." Northwestern Creamery Journal, vol. 1 (Minneapolis, 1898). For cheesemaking instructions, see the Dairy Reporter, 3 (St. Paul, Dec. 26, 1899), 501; New York Produce Review and American Creamery, 12 (New York, June 19, 1901), 29; Hoard's Dairyman, 29 (Ft. Atkinson, May 13, 1898), 270; New York Produce Review and American Creamery, 7 (New York, Jan. 11, 1899), 2.
- 83 Jersey Bulletin, 18 (Indianapolis, Apr. 12, 1899), 294-99; Hoard's Dairyman, 29 (Ft. Atkinson, May 20, 1898), 200; Creamery Gazette, 22 (Des Moines, Sept. 15, 1898), 6.
- 84 Creamery Gazette, 22 (Des Moines, Sept. 15, 1898), 6.
- 85 Kansas Dairy Farmer, 1 (Enterprise, Oct., 1899), 6.
- 86 Dairy Age, 1 (Beloit, June, 1900), 9.
- 87 On breeding vs. buying, see the Practical Dairyman and Agriculturist, 4 (Chatham, Feb., 1898), 9; the quotation is from Dairy and Creamery, 1 (Chicago, May 15, 1899), 6.
- 88 Kansas Dairy Farmer, 1 (Enterprise, Oct., 1899), 10.
- 89 St. Paul Dairy Reporter, 1 (St. Paul, Feb. 8, 1898), 164; Practical Dairyman and Agriculturist, 4 (Chatham, Aug., 1898), 12; Dairy Age, 1 (Beloit, Dec., 1900), 8.
- 90 Dairy and Creamery, 1 (Chicago, May 15, 1899), 7.
- 91 Dairy Age, 1 (Beloit, Apr., 1900), 1.
- 92 Practical Dairyman and American Stockman, 8 (New York, June, 1900), 4.
- 93 Creamery Gazette, 21 (Des Moines, Aug. 1, 1896), 3.
- 94 Creamery Journal, 9 (Waterloo, Aug., 1898), 15.
- 95 Kansas Dairyman, 1 (Eureka, Mar., 1898), 15.
- 96 Hoard's Dairyman, 29 (Ft. Atkinson, May 20, 1898), 288.
- 97 Creamery Journal, 8 (Waterloo, June 10, 1898—Special Issue), 4; New York Produce Review and American Creamery, 8 (New York, Nov. 9, 1898), 16; Elgin Dairy Report, 8 (Elgin, June 13, 1898), 2; Creamery Journal, 9 (Waterloo, Oct., 1898), 23.
- 98 New York Produce Review and American Creamery, 12 (New York, Sept. 11, 1901), 2; *ibid.* (Sept. 18, 1901), p. 2.

Chapter 8

- 1 Merle Curti, Growth of American Thought (New York, 1943), pp. 593-604.
- 2 Jersey Advocate and Dairyman, 1 (New York, Apr. 10, 1901), 3.
- 3 *Ibid.*
- 4 Holstein-Friesian World, 1 (Ithaca, Jan. 1, 1904), 10.
- 5 *Ibid.*, p. 10-11.
- 6 *Ibid.*
- 7 Based on reviews of the first volumes of the Jersey Advocate and Dairyman, vol. 1 (New York, 1901) and the Holstein-Friesian World, vol. 1 (Ithaca, 1904).
- 8 Holstein-Friesian World, 1 (Ithaca, Jan. 1, 1904), 13; a fair sample of Fuller's choice in poetry is:

Laura and Company.

Laura cooed like a dove then—
Now she's always so cross;

She was ruled just by Love then—
Love no longer is 'boss.'

She avoided all strife then—
Now she's developed a will
She was joyous with life then—
Now she's always 'so ill.'

She was so full of mirth then—
Now she's wearied by mirth;
Laura's wants were so few then—
Now she wants the whole earth.

She was fond of a kiss then—
Now she's just sick of kisses.
She was only a Miss then—
Laura now is a Mrs.

—James Rowe, in the Smart Set.

Quoted in the Jersey Advocate and Dairyman, 1 (New York, July 17, 1901), 14.

9 Holstein-Friesian World, 1 (Ithaca, Sept. 15, 1904), 293.

10 Ibid., 2 (Sept. 15, 1905), 307; note that the article "The" before the title was dropped in 1905; the Conscript of 1813 was still running serially in 1907, see Holstein-Friesian World, vol. 4 (Ithaca, Jan. 22, 1907).

11 Stuntz, List.

12 Holstein-Friesian World, vol. 2 (Ithaca, 1905).

13 Jersey Advocate and Dairyman, 1 (New York, Apr. 10, 1901), 5.

14 Ibid., p. 3.

15 Ibid.

16 Holstein-Friesian Register, 46 (Brattleboro, Apr. 1, 1928), 110.

17 Ayer's American Newspaper Annual and Directory, volumes for 1912 and 1915.

18 Another explanation of the origin of Kimball's Dairy Farmer is offered by Seaman, "Early Iowa Farm Journals," pp. 11-12. "Kimball's next idea was to establish a journal to be devoted to dairy production. He had been studying the field and discovered that, although the output of creamery butter in Iowa was tremendous, there were almost no herds of dairy cattle in that state. He realized that this butter was being made from the cream of cows that were bred for beef and milked only as an indifferent sideline. He saw how much greater the profit of these producers would be if real dairy cows were maintained on the farms, and he began preaching this new idea through a new paper which he called Kimball's Dairy Farmer." Quotation in text from Kimball's Dairy Farmer, 1 (Waterloo, Iowa., Jan. 15, 1903) 1.

19 Hoard's Dairyman, 27 (Ft. Atkinson, Mar. 13, 1896), 68, for one of the more extended outbursts on the subject of constant repetition of elementary facts.

20 Stuntz, List, for end of journals.

21 Dairy World, 22 (Chicago, Oct., 1902), 8-9.

22 See Dairy World, Chapters 3 and 6.

- 23 Dairy Farmer, 27 (Des Moines, Sept., 1929), 11.
- 24 Western Farmer and Dairyman, vol. 1 (Mankato, Minn., Apr., 1905).
- 25 Ibid. (May, 1905), p. 48.
- 26 Ibid. (Oct., 1905), pp. 198 and 203; also see all of volume one.
- 27 Stuntz, List.
- 28 Live Stock and Dairy Journal, 2 (Fresno, Calif., Dec., 1903), 5.
- 29 Ibid., vol. 1 (1903); see also the Pacific Dairy Review, 55 (San Francisco, June, 1951), 26-34.
- 30 Quote from the Live Stock and Dairy Journal, 1 (Fresno, Aug., 1903), 55; also ibid., pp. 56, 69-81. After 1903 the journal ran a column on "City Milk Supply."
- 31 Ibid., p. 1 (Fresno, Nov., 1903), 134.
- 32 See chapter 9 for disputes on this problem.
- 33 Live Stock and Dairy Journal, 1 (Fresno, Aug., 1903), 63; ibid. (Nov., 1903), p. 139; ibid., 2 (Dec., 1903), 5.
- 34 Ibid., 1 (Nov., 1903), 139.
- 35 Ibid., vol. 3 (Aug., 1904).
- 36 Ibid., 4 (Feb., 1905), 7.
- 37 Union List of Serials. In 1909 R. D. McFarland succeeded Blemer as editor, and in 1915 C. L. Hughes became editor. The periodical shifted title between "Live Stock" and "Livestock" several times for no apparent reason. See the Live Stock and Dairy Journal, vol. 8 (Fresno, July, 1909); the Livestock and Dairy Journal, vol. 16 (Sacramento, Calif., Sept., 1916); the Live Stock and Dairy Journal, vol. 14 (Sacramento, July, 1915).
- 38 The first of the two obscure ventures was the Western Poultry and Dairy Journal, a monthly published at Kearney, Nebraska, which lasted from August to September, 1904; see Stuntz, List. The other journal was the Dairy Market Reporter of Whitewater, Wisconsin, which began and ended in 1905; see Stuntz, List.
- 39 The journal apparently began as the Milk and Cheese Journal at Milwaukee, January to March, 1904; see Stuntz, List. Quotations from the Cheese and Dairy Journal, 1 (Whitewater, May, 1904), 6.
- 40 Cheese and Dairy Journal, 1 (Whitewater, June, 1904), 6.
- 41 Ibid., 2 (Aug., 1904), 7; for an earlier attempt at polylingual journalism which may not have materialized see Dairy Messenger, Chapter 5.
- 42 Cheese and Dairy Journal and Creamery Reporter, 3 (Whitewater, June, 1905), 6-7.
- 43 The last issue available is for that date; see also Stuntz, List.
- 44 Cheese and Dairy Journal, 1 (Whitewater, May, 1904), 1; ibid. (June, 1904), 6; ibid., 2 (Sept., 1904), 7; ibid. (Nov., 1904), pp. 1, 7, 11, 18, 20; ibid., 3 (Feb., 1905), 7.
- 45 Ibid., 2 (Sept., 1904), 7.
- 46 American Cheesemaker, 18 (Grand Rapids, Jan., 1904), 6; ibid., 19 (Sept., 1904), 3.
- 47 Letter from Thomas D. Cutler to the authors, dated Apr. 28, 1953.

- 48 Dairy World, 22 (Chicago, Jan., 1902), 8; Live Stock and Dairy Journal, 1 (Fresno, Aug., 1903), 52.
- 49 Cheese and Dairy Journal and Creamery Reporter, 4 (Whitewater, Aug., 1905), 7; Holstein-Friesian World, 2 (Ithaca, Dec. 15, 1905), 406, also put in a word about tariffs and subsidies in maritime affairs, noting in part: "It may be a wise government policy to maintain a high tariff wall about our manufacturers of steel plate so that they may charge our ship builders \$10 a ton more for material than they furnish a similar material to foreign competing companies, and then establish a ship subsidy in order that American shipping may 'once again resume its former position in the ocean-carrying trade,' but we think not. This question is likely to come to the front again this winter, and it is a good question to think about."
- 50 Chicago Dairy Produce, 9 (Chicago, May 31, 1902), 2; ibid. (Sept. 2, 1902), p. 2; ibid. (May 12, 1903), p. 2.
- 51 Elgin Dairy Report, 13 (Elgin, Mar. 28, 1904), 2.
- 52 American Dairyman, 60 (New York, Nov., 1906), 59; Jersey Bulletin and Dairy Farming, 23 (Indianapolis, Jan. 13, 1904), 35; ibid., p. 37.
- 53 Jersey Bulletin and Dairy Farming, 23 (Indianapolis, Jan. 13, 1904), 37.
- 54 Quoted in the Dairy Record, 25 (St. Paul, June 18, 1924), 16.
- 55 Kimball's Dairy Farmer, 1 (Waterloo, Aug. 15, 1903), 1; American Cheesemaker, 18 (Grand Rapids, Aug., 1903), 7; Chicago Dairy Produce, 9 (Chicago, Mar. 3, 1903), 18; Dairy World, 24 (Chicago, Apr., 1904), 8.
- 56 Chicago Dairy Produce, 9 (Chicago, Dec. 2, 1902), 16-17; Elgin Dairy Report, 14 (Elgin, July 2, 1904), 4.
- 57 As Knight put it: "It is probable that there will be considerable less importance placed on the utterance of Major Alvord, chief of the Dairy Division of the Bureau of Animal Industry of the Agricultural Department of the government when it is known that the views he expressed at Milwaukee regarding the coloring of butter are only his individual ideas as a rabid advocate of Jerseys, and not only do not reflect the opinions of the secretary of agriculture, but are diametrically opposed thereto." Chicago Dairy Produce, 9 (Chicago, Nov. 4, 1902), 2.
- 58 ibid., 9 (May 31, 1902), 26 36; American Cheesemaker, 18 (Grand Rapids, Nov., 1903), 1.
- 59 Cheese and Dairy Journal, 3 (Whitewater, Feb., 1905), 6; American Cheesemaker, 18 (Grand Rapids, Nov., 1903), 1; S. M. Babcock and H. L. Russell, "Influence of Temperature on the Ripening of Cheese," Annual Report of the Agricultural Experiment Station of the University of Wisconsin (Madison, 1897), pp. 194-210; S. M. Babcock, H. L. Russell, A. Vivian and U. S. Baer, "Cold Curing Cheese," Annual Report of the Agricultural Experiment Station of the University of Wisconsin (Madison, 1904), pp. 217-219; American Cheesemaker, 19 (Grand Rapids, June, 1904), 7; ibid., 20 (Nov., 1905), 1.
- 60 On wetting the hands in the milk see Jersey Advocate and Dairy-

- man, 1 (New York, Dec. 4, 1901), 10; quotation from Chicago Dairy Produce, 9 (Chicago, May 31, 1902), 10.
- 61 Cheese and Dairy Journal, 1 (Whitewater, May, 1904), 4; for detailed instructions on washing cans and other equipment see Chicago Dairy Produce, 9 (Chicago, Dec. 2, 1902), 20.
- 62 Elgin Dairy Report, 15 (Elgin, Dec. 4, 1905), 6.
- 63 Chicago Dairy Produce, 9 (Chicago, May 31, 1902), 10, viewed the matter differently. In spite of evidence of the antiquity of the problem, editorial interest was new: "The old, old story of moldy butter tubs is being told again. It starts in fully a month earlier and we predict that before the season is over more money will be lost from this trouble than during any previous year. A damp season, hot days, and poor refrigerators, are the chief cause of this trouble."
- 64 Dairy Age, 3 (Beloit, Sept., 1902), 4; Elgin Dairy Report, 13 (Elgin, Nov. 30, 1903), 6; ibid., 15 (Oct. 16, 1905), 2.
- 65 American Cheesemaker, 20 (Grand Rapids, Oct., 1905), 6.
- 66 Dairy World, 22 (Chicago, Oct., 1902), 4.
- 67 Chicago Dairy Produce, 9 (Chicago, Jan. 20, 1903), 1; Dairy Age, 3 (Beloit, June, 1902), 4.
- 68 Dairy World, 22 (Chicago, Jan., 1902), 9-10.
- 69 Kimball's Dairy Farmer, 1 (Waterloo, Aug. 15, 1903), 6; Chicago Dairy Produce, 9 (Chicago, Jan. 20, 1903), 1.
- 70 American Cheesemaker, 19 (Grand Rapids, June, 1904), 3; Holstein-Friesian World, 1 (Ithaca, June 15, 1904), 195; Cheese and Dairy Journal and Creamery Reporter, 4 (Whitewater, Jan., 1906), 8; Dairy and Creamery, 6 (Chicago, Jan., 1904), 28.
- 71 On buying cows see Dairy Age, 3 (Beloit, Oct., 1902), 4; quotation from American Dairyman, 46 (New York, Dec. 29, 1904), 117; on cow testing, Cheese and Dairy Journal, 1 (Whitewater, May, 1904), 9; Dairy World, 24 (Chicago, Apr., 1904), 9.
- 72 Jersey Bulletin and Dairy Farming, 23 (Indianapolis, Jan. 6, 1904), 10.
- 73 Dairy World, 22 (Chicago, Jan., 1902), 2.
- 74 New York Produce Review and American Creamery, 21 (New York, Nov. 22, 1905), 130.
- 75 American Dairyman, 46 (New York, Dec. 29, 1904), 113-14.
- 76 The Holstein-Friesian World was slow in entering the breed fights, and did so with considerable caution. The editor even wanted facts, which was unheard of before: "We would like to gather data with reference to breeders or dairyman who started with one breed and for any reason changed to some other breed. We know personally a number of cases where men have started with Jerseys and changed over to Holsteins, but we do not recall a single instance where the reverse has taken place. People who have made such a change, or who know of parties who have, will confer a favor by writing to us and giving their reasons for the change, or such information as they are enabled to gather." Holstein-Friesian World, 2 (Ithaca, June 15, 1905), 206. For other details on breed disputes see: The Jersey

- Bulletin and Dairy Farming, 23 (Indianapolis, Jan. 6, 1904), 7; the Holstein-Friesian World, 1 (Ithaca, Jan. 15, 1904), 23 and 31; American Dairyman, 46 (New York, Dec. 29, 1904), 113; ibid., (Feb. 16, 1905), 169.
- 77 Nebraska Dairyman, 8 (Lincoln, Aug., 1904), 4.
- 78 Holstein-Friesian World, 1 (Ithaca, Jan. 1, 1904), 11.
- 79 On abortion, Dairy World, 22 (Chicago, Oct., 1902), 1; on tuberculosis, Chicago Dairy Produce, 9 (Chicago, May 31, 1902), 33; Jersey Advocate and Dairyman, 2 (New York, Dec. 17, 1902), 738.
- 80 The successive borrowing of this article is interesting since it shows that editorial interest was widespread and opinions unanimous to permit this sort of lifting. Hoard's Dairyman, quoted in the St. Paul Farmer, requoted in Chicago Dairy Produce, 9 (Chicago, Sept. 2, 1902), 3.
- 81 Holstein-Friesian World, 2 (Ithaca, Mar. 15, 1905), 92; Chicago Dairy Produce, 9 (Chicago, Apr. 31, 1903), 12.
- 82 Chicago Dairy Produce, 9 (Chicago, Apr. 21, 1903), 12; Dairy World, 22 (Chicago, Oct., 1902), 12; Western Farmer and Dairyman, 1 (Mankato, May 1, 1905), 55.
- 83 For comments on local fairs see the Live Stock and Dairy Journal, 1 (Fresno, Aug., 1903), 54; details on the Pan-American, Jersey Advocate and Dairyman, 1 (New York, July 17, 1901), 3-7, 9-10.
- 84 Dairy World, vol. 24 (Chicago, 1904); Jersey Bulletin and Dairy Farming, 23 (Indianapolis, Jan. 6, 1904), 7; Elgin Dairy Report, 14 (Elgin, July 2, 1904), 6; Dairy World, 24 (Chicago, Dec., 1904), 10; Jersey Bulletin and Dairy Farming, 23 (Indianapolis, Jan. 6, 1904), 7.
- 85 Elgin Dairy Report, vol. 14 (Elgin, Jan. 20, 1905).

Chapter 9

- 1 U.S. Census, 1910: Abstract of the Census (Washington, D.C., 1913), pp. 63-64.
- 2 Ibid., p. 64.
- 3 U.S. Census, 1910, vol. V: Agriculture (Washington, D.C., 1913), p. 349; percent of all farms which reported having dairy cows:

	1900	1910
United States	78.7	80.8
New England	80.6	77.9
Middle Atlantic	87.2	85.5
East North Central	88.1	89.9
West North Central	87.2	89.1
South Atlantic	67.0	71.5
East South Central	73.4	78.2
West South Central	70.1	76.8
Mountain	68.8	65.6
Pacific	73.9	73.6

4. Ibid., average number of dairy cows per farm reporting:

	<u>1900</u>	<u>1910</u>
United States	3.8	4.0
New England	5.8	5.7
Middle Atlantic	6.1	6.5
East North Central	4.0	4.8
West North Central	4.9	5.4
South Atlantic	2.1	2.3
East South Central	1.9	2.0
West South Central	3.1	3.1
Mountain	4.7	4.3
Pacific	5.1	5.9

- 5 Heatwole's Dairy Paper, 1 (Northfield, Minn., Mar., 1906), 1.
 6 Ibid.
 7 Ibid., p. 7.
 8 Ibid., p. 10.
 9 Ibid.
 10 Minnesota Dairyman, 3 (Northfield, Mar., 1908), 8.
 11 Northwest Dairyman, 9 (Northfield, Minn., June, 1914), 13.
 12 Union List of Serials. Failure of local dairy journals was not unusual for that period. A shaky financial condition, plus the paper shortage seemed to cause the demise of most of these journals during the first World War, if they lasted that long. See Michigan Dairy Farmer, this chapter for more complete account of what probably happened.
 13 Milk Man, 1 (Kansas City, Mo., Apr., 1908), 1.
 14 Ibid.
 15 Ibid. (Aug., 1909), p. 7.
 16 Ibid. (Apr., 1908), p. 9.
 17 The last issue available is that for April, 1910; also see Stuntz, List.
 18 Northwestern Dairyman, 1 (St. Paul, Minn., Oct. 31, 1908), 12.
 19 Ibid.
 20 Ibid.; ibid. (Feb. 13, 1909), p. 5.
 21 Ibid. (Nov. 28, 1908), p. 11.
 22 Ibid., 2 (Nov. 1, 1909), 10 offers a fair example of oleo protest as well as examples of lifted articles because none of the protest is original.
 23 The following is a typical example of the arguments used against coöperative creameries:
 THE ATTITUDE OF THE COUNTRY PRESS.
 "The country press is fond of taking a rap at the centralizers, and of urging the farmers to support their home creameries, regardless of the returns which the farmers are to receive for this patronage and loyalty. They even go so far as to encourage and promote the building of local co-operative creameries, knowing that such concerns, except under the most favorable conditions, are doomed to failure.
 "We believe in local creameries where there is a sufficient

cow population to guarantee their support the year round, and, in such cases, the farmers' support and patronage is extremely necessary.

"However, the farmer should consider his own interests first, and we see no sane reason why he should lose several cents a pound on his butterfat simply to prove himself a good fellow in the eyes of the local paper. If the home creamery is paying the highest price for butterfat well and good; but if it is not, as is the case so often, then the farmer has every reason for shipping his cream to buyers who will give him the largest returns for value received." Northwestern Dairyman, 1 (St. Paul, Oct. 15, 1909), 9. For end of the journal see Stuntz, List; the last issue available is for Oct. 15, 1910.

24 Dairy Bulletin, 1 (Macedonia, O., Apr., 1909), 4, 8.

25 Ibid., p. 8.

26 Ibid., pp. 6-7.

27 Ibid., p. 8.

28 Ibid., (Oct., 1909).

29 Michigan Dairy Farmer, 1 (Detroit, Apr. 3, 1909), 3.

30 Ibid., 5 (July 13, 1913), 2.

31 Brownell's Dairy Farmer, 7 (Detroit, Apr. 1, 1915), 8.

32 Ibid.; ibid., 8 (Feb. 1, 1917), 2.

33 Ibid., 8 (Feb. 1, 1917), 2.

34 Brownell's Dairy Farmer, vol. 8 (Detroit, Apr. 1, 1917) is the last issue available, but carries no notice of an end of publication. The editor apparently thought the paper was only temporarily discontinued; letter from G. H. Brownell to Librarian, University of Wisconsin, pasted in cover of first volume of the Michigan Dairy Farmer.

35 U.S. Census, 1910: Abstract of the Census, p. 64.

36 Colorado Dairyman, 1 (Denver, Mar., 1909), 1.

37 Ibid., p. 4; ibid., p. 6-7; ibid., vol. 2 (Apr., 1910); the last issue available is for May, 1915.

38 Stuntz, List; Guernsey Breeders' Journal, 84 (Peterboro, N.H., Mar. 15, 1952), 781; Guernsey Breeders' Sale List and Bulletin, vol. 2 (Peterboro, N.H., 1907).

39 Guernsey Breeders' Sale List and Bulletin, vol. 2 (Peterboro, 1907).

40 Ibid. (Jan., 1907), p/ 3.

41 Stuntz, List; Guernsey Breeders' Journal, 84 (Peterboro, Mar. 15, 1952), 781; apparently there was an attempt to revive the defunct Jersey Advocate and Dairyman in New York in 1906. The journal probably died that year. Some of the more obscure papers of the period include the Farm and Dairy Herald, a weekly begun at Sheboygan, Wis., in 1906, moved to Plymouth, Wis., in 1908; Cream Bulletin, a monthly, published at Stockton, Calif., in 1907; the Dairy and Live Stock, a monthly published at North Yakima, Wash., in 1907; the Milk Producer, published monthly in Chicago in 1909; and the Missouri Dairyman, a weekly, begun at Jefferson City, in 1909. The Sheboygan County News changed to the Sheboygan County News and Market

Reporter some time around 1909. It was published at Sheboygan Falls and was still in existence in 1950 as the Cheese Reporter. For above, see Stuntz, List, and Ayer's Newspaper Annual for appropriate years.

The first effort at a house organ (after Jensen's Dairyman) of which there is any considerable record was the Blue Valley Bulletin, published by the dairy manufacturing concern of the same name, and issued variously from St. Joseph, Chicago, Sioux City, Indianapolis, and Hastings, Neb. It was published simultaneously in several of these cities at different periods. For details on frequency of publication see Stuntz, List. The Blue Valley Bulletin was distributed free to patrons of the creamery and began publication in 1907. See also the Ice Cream Trade Journal, 8 (New York, Jan., 1912), 44 for further information on the Blue Valley Bulletin.

In Sept., 1907, a journal identified as the American Farmer, vol. 61 (New York, 1907), appeared and on Oct. 10, 1907 changed title to the Practical Dairyman, beginning anew as volume 1. The claim of being volume 61 was subsequently retracted when the title was changed. As the editor observed: "THE PRACTICAL DAIRYMAN is the same journal that has been seeking your favor since September 12, when it was first published; its policy is the same; its management is the same; its ownership is the same. It is a new weekly dairy journal under new management. The change is in name only. Its object is to serve your practical requirements and those of every dairy farmer . . ." Practical Dairyman, 1 (New York, Oct. 10, 1907), 34. This journal should not be confused with the Practical Dairyman and American Stockman, which was consolidated with the Agricultural Epitomist in 1901; the Epitomist ceased publication in 1909. See Union List of Serials.

- 42 In the order of the titles of the columns mentioned: New York Produce Review and American Creamery, vol. 21 (New York, Jan. 3, 1906); Kimball's Dairy Farmer, vol. 5 (Waterloo, June 1, 1907); ibid., for THE HOG; Pacific Dairy Review, vol. 11 (San Francisco, May 2, 1907); Live Stock and Dairy, vol. 8 (Fresno, Feb., 1909); Dairy Record, vol. 8 (St. Paul, Nov. 6, 1907); the list of possible journals and column titles is by no means complete; this is merely a small sample.
- 43 See particularly, New York Produce Review and American Creamery, vol. 26 (New York, 1908); Pacific Dairy Review, vol. 11 (San Francisco, 1907).
- 44 Milk News, 17 (Chicago, Aug., 1909), 1.
- 45 Western Farmer and Dairyman, 2 (Mankato, June 15, 1906), 135.
- 46 American Cheesemaker, 24 (Grand Rapids, Jan., 1910) 6; there also occasionally appeared items of foreign news, sometimes pertinent to dairying and sometimes not. Titles such as "SULTAN AHMED MIR ZA," from the Milk News, 17 (Chicago, Aug., 1909), 3; or "LESSONS FROM EUROPEAN DAIRYING," from the Creamery Journal, 17 (Waterloo, Feb. 1, 1906) 32; or "COMMENTS FROM COPENHAGEN," in the New York Produce

- Review and American Creamery, 26 (June 24, 1908), 336 were not unusual.
- 47 Hoard's Dairyman, 38 (Ft. Atkinson, Oct. 4, 1907), 905.
 - 48 Holstein-Friesian World, 4 (Ithaca, Mar. 8, 1907), 98.
 - 49 Quoted in the Milk News, 17 (Chicago, Aug., 1909), 4.
 - 50 Nebraska Dairyman, 10 (Lincoln, Jan., 1907), 4.
 - 51 Western Farmer and Dairyman, 2 (Mankato, Apr. 15, 1906), 43; "Gasoline Engines Make Satisfactory Power," Creamery Journal, 18 (Waterloo, May 1, 1907), 20; "Locating Gasoline Engine Troubles," Ice Cream Trade Journal quoted in Dairy Record, 8 (St. Paul, May 29, 1907), 1; these may serve as examples.
 - 52 Creamery Journal, 20 (Waterloo, July 15, 1909), 5-6.
 - 53 New York Produce Review and American Creamery, 26 (New York, May 6, 1908), 51.
 - 54 American Cheesemaker, 21 (Grand Rapids, June, 1906), 2; New York Produce Review and American Creamery, 26 (New York, June 24, 1908), 338; Michigan Dairy Farmer, 1 (Detroit, Apr. 10, 1909), 7.
 - 55 Michigan Dairy Farmer, 1 (Detroit, Apr. 10, 1909), 7.
 - 56 Creamery Journal, 17 (Waterloo, Nov. 1, 1906), 22.
 - 57 Live Stock and Dairy Journal, 8 (Fresno, Mar., 1909), 8; Hoard's Dairyman, 38 (Ft. Atkinson, Dec. 13, 1907), 1154; other demands were made, for example see Kimball's Dairy Farmer, 5 (Waterloo, June 1, 1907), 10; and Pacific Dairy Review, 11 (San Francisco, Nov. 14, 1907), 3.
 - 58 Creamery Journal, 17 (Waterloo, June 10, 1906), 30.
 - 59 Ibid. (July 1, 1906), p. 14; Kimball's Dairy Farmer, 5 (Waterloo, Aug. 15, 1907), 2; Pacific Dairy Review, 11 (San Francisco, Jan. 31, 1907), 4; Hoard's Dairyman, 38 (July 19, 1907), 636; Practical Dairyman, vol. 1 (New York, Feb., 1908).
 - 60 Quoted from an unnamed exchange in the Creamery Journal, 18 (Waterloo, July 1, 1907), 15.
 - 61 Ibid., 17 (Mar. 1, 1906), 15; Milk Man, 1 (Kansas City, Apr., 1908), 10.
 - 62 Pacific Dairy Review, 11 (San Francisco, Jan. 31, 1907), 6; Milk Man, 2 (Kansas City, Sept., 1909), 5.
 - 63 Practical Dairyman, 1 (New York, Apr. 9, 1908), 270, reflects some of the confusion.
 - 64 Creamery Journal, 21 (Waterloo, Dec. 1, 1910), 15.
 - 65 Western Farmer and Dairyman, 1 (Mankato, Jan. 1, 1906), 307; New York Produce Review and American Creamery, 21 (New York, Mar. 14, 1906), 842; Chicago Dairy Produce, 14 (Chicago, May 28, 1907), 28; on ice cream see ibid., p. 12 and Dairy Record, 8 (St. Paul, June 5, 1907), 10-11.
 - 66 Creamery Journal, 17 (Waterloo, Nov. 1, 1906), 15.
 - 67 Hoard's Dairyman, 38 (Ft. Atkinson, May 31, 1907), 462; Blooded Stock, 16 (Oxford, Pa., Mar., 1910), 6.
 - 68 Pacific Dairy Review, 11 (San Francisco, Aug. 22, 1907), 6; Creamery Journal, 17 (Waterloo, Nov. 1, 1906), 27.
 - 69 Dairy Record, 8 (St. Paul, May 29, 1907), 18.
 - 70 Creamery Journal, 17 (Waterloo, June 10, 1906), 14.

- 71 Hoard's Dairyman, 38 (Ft. Atkinson, Feb. 15, 1907), 36-37.
- 72 Creamery Journal, 18 (Waterloo, Dec. 1, 1907), 15.
- 73 Chicago Dairy Produce, 14 (Chicago, May 28, 1907), 2; New York Produce Review and American Creamery, 26 (June 17, 1908), 282.
- 74 Creamery Journal, 20 (Waterloo, Feb. 1, 1909), 14; ibid. (Jan. 1, 1910), pp. 14-15.
- 75 ibid., (Jan., 1910), p. 15.
- 76 Michigan Dairy Farmer, 1 (Detroit, July 17, 1909), 6.
- 77 Creamery Journal, 21 (Waterloo, Dec. 1, 1910), 24.
- 78 Nebraska Dairyman, 10 (Lincoln, Jan., 1907), 2.
- 79 Dairy Record, 8 (St. Paul, July 31, 1908), 11.
- 80 ibid. (Mar. 25, 1908), p. 8.
- 81 Heatwole's Dairy Paper, 2 (Northfield, Feb., 1908), 6-7;
Brownell of the Michigan Dairy Farmer, was obviously hedging when he wrote: "Just now there is some strife between the local co-operative creameries and the centralizers. Each has its merits and each its advocates. Let us hear from the readers about their views on the subject." Michigan Dairy Farmer, 1 (Detroit, May 1, 1909), 6.
- 82 New York Produce Review and American Creamery, 26 (New York, Aug. 19, 1908), 630.
- 83 Hoard's Dairyman, 38 (Ft. Atkinson, Feb. 8, 1907), 5; Kimball's Dairy Farmer, 5 (Waterloo, Feb., 1907), 10; the competition between separator manufacturers was often fierce, and the contents of the advertisements unrestrained. As one of them read: "ASLEEP? NURSING A SORE TOE? OR DEAD?"
"Now that it's all over, our discy flavored acquaintance, Rattletrapski De Lavalski, has waked up among his 32 odd pie tins and cries 'fake.' Trying to explain why he wasn't at that little affair at Kendall, Wis. — when six farmers of integrity, honorable men, appointed as a committee by the farmers in the vicinity of Kendall, Wis., unanimously decided the Sharples Tubular Cream Separator to be the best in the world." And there was a great deal more. The De Laval company was capable of replying in kind. From the Creamery Journal, 17 (Waterloo, June 10, 1906), front cover.
- 84 New York Produce Review (May 6, 1908), p. 38.
- 85 Creamery Journal, 20 (Waterloo, June 15, 1909), 14.
- 86 Pacific Dairy Review, 11 (San Francisco, Aug. 22, 1907), 16.
- 87 ibid., p. 2; Milk News, 17 (Chicago, Sept.-Oct., 1909), 1.
- 88 Practical Dairyman, 1 (New York, Feb. 20, 1908), 1.
- 89 Chicago Dairy Produce, 14 (Chicago, Feb. 25, 1908), 2.
- 90 Creamery Journal, 20 (Waterloo, Jan. 1, 1910), 29.
- 91 ibid., 17 (June 10, 1906), 5.
- 92 ibid., 21 (June 15, 1910), 12.
- 93 Northwestern Dairyman, 2 (St. Paul, Nov. 1, 1909), 16; Kimball's Dairy Farmer, 4 (Waterloo, Jan. 15, 1906), 16.
- 94 Heatwole's Dairy Paper, 1 (Northfield, Mar., 1906), 9.
- 95 Kimball's Dairy Farmer, vol. 5 (Waterloo, 1907).
- 96 Hoard's Dairyman, 38 (Ft. Atkinson, Oct. 4, 1907), 905; there

- was also some advice given on planting seed corn, ibid. (Jan. 17, 1908), 1292; for more on alfalfa versus corn see Kimball's Dairy Farmer, 5 (Waterloo, Feb., 1907), 31.
- 97 Holstein-Friesian World, 4 (Ithaca, Jan. 8, 1907), 9.
- 98 Live Stock and Dairy Journal, 8 (Fresno, Jan., 1909), 14.
- 99 Articles on breeds of cattle appeared in such diverse journals as Creamery Journal, vol. 21 (Waterloo, 1910); Blooded Stock, vol. 10 (Oxford, Pa., 1905); Milk Man, vol. 3 (Kansas City, 1910).
- 100 Kimball's Dairy Farmer, 5 (Waterloo, June 1, 1907), 7.
- 101 Creamery Journal, 17 (Waterloo, Feb. 1, 1906), 38; a solution offered by Heatwole's Dairy Paper, 1 (Northfield, Mar., 1906), 8, was simple enough, even though it avoided the breed question: "If the dairymen of the Northwest would dairy and the beef breeders would produce beef there would be no room for the dual-purpose argument and both classes would be more contented and make more money."
- 102 Quotation from Kimball's Dairy Farmer, 5 (Waterloo, Aug. 1, 1907), 11; for produal-purpose note see Northwestern Dairyman, 1 (St. Paul, Oct. 31, 1908), 19.
- 103 Live Stock and Dairy Journal, 8 (Fresno, Jan., 1909), 15.
- 104 Hoard's Dairyman, 38 (Ft. Atkinson, Feb. 15, 1907), 38; other journals which carried similar types of articles were in particular: Kimball's Dairy Farmer, vol. 4 (Waterloo, 1906) and the American Cheesemaker, vol. 22 (Grand Rapids, 1907).
- 105 Heatwole's Dairy Paper, 1 (Northfield, Mar., 1906), 8.
- 106 Live Stock and Dairy Journal, 8 (Fresno, Mar., 1909), 5; Heatwole's Dairy Paper, 1 (Northfield, Mar., 1906), 2; Michigan Dairy Farmer, 1 (Detroit, Apr. 10, 1909), 4.
- 107 Kimball's Dairy Farmer, vol. 5 (Waterloo, 1907); ibid., vol. 4 (Apr. 15, 1906); quotation from New York Produce Review and American Creamery, 26 (June 17, 1908), 282.
- 108 Western Farmer and Dairyman, vol. 1 (Mankato, Jan. 1, 1906); Michigan Dairy Farmer, 1 (Detroit, June 5, 1909), 6.
- 109 For example the American Dairy Goat News, founded at Charlotte, N.C., in 1939; Dairy Goat Journal, founded in 1923 at Fairbury, Neb.; Goat World, established at Vincennes, Ind. in 1916, for all of which see Union List of Serials and Ayer's.
- 110 Holstein-Friesian World, 4 (Ithaca, Oct. 8, 1907), 381.
- 111 See Chapter 10.
- 112 Pacific Dairy Review, 11 (San Francisco, May 23, 1907), 14; New York Produce Review and American Creamery, 21 (New York, Feb. 14, 1906), 630; Kimball's Dairy Farmer, 4 (Waterloo, Apr. 1, 1906), 2; the editor of the Western Farmer and Dairyman, 1 (Mankato, Feb. 15, 1906), 365, combined the back to the land movement with the frontier hypothesis when he wrote: "Just now there seems to be a lull in the land business, but it is only the lull before the storm. There are too many good people who realize the importance of securing homes of their own, or land for their children. The bountiful crops, and the drift from the city to the country, and the fact that there

never will be any more lands, will cause a better and more persistent movement than heretofore."

- 113 Kimball's Dairy Farmer, 5 (Waterloo, Apr. 15, 1907), 2.
- 114 For an argument based on morality see Northwestern Dairyman, 1 (St. Paul, Nov. 28, 1908), 12.
- 115 Michigan Dairy Farmer, 1 (Detroit, May 29, 1909), 5.
- 116 Holstein-Friesian World, 4 (Ithaca, Jan. 8, 1907), 9.
- 117 Nebraska Dairyman, 10 (Lincoln, Jan., 1907), 7.
- 118 Ibid., p. 6.
- 119 Creamery Journal, 20 (Waterloo, June 15, 1909), 20.
- 120 Kimball's Dairy Farmer, 5 (Waterloo, Feb. 1, 1907), 19.
- 121 Kimball's Dairy Farmer, 5 (Waterloo, Dec. 15, 1907), 2; a reaction earlier the same year was expressed by the Pacific Dairy Review: "A Review representative, in the hope of maintaining material for a two column article started out to interview the leading butter merchants in expectation of obtaining a representative expression on the general business conditions of the trade. About one of the first gentlemen approached, called our attention to a card over his desk bearing the following legend: 'Cheer up,' the worst has come and gone. This terse sentence so completely seems to express the sentiment of many dealers, that we feel unable to improve on it." Pacific Dairy Review, 11 (San Francisco, Aug. 22, 1907), 17.
- 122 Chicago Dairy Produce, 14 (Chicago, Jan. 14, 1908), 2; Milk News, 17 (Chicago, Sept.-Oct., 1909), 2.

Chapter 10

- 1 See Appendix A for more information on the journals which appeared between 1911 and 1918.
- 2 Butter, Cheese and Egg Journal, vol. 1 (Milwaukee, Jan. 26, 1910).
- 3 Butter and Cheese Journal, vol. 19 (Milwaukee, Apr. 4, 1928).
- 4 Butter, Cheese and Egg Journal, 11 (Milwaukee, Dec. 8, 1920), 2.
- 5 Butter and Cheese Journal, 21 (Milwaukee, Aug. 27, 1930), 4.
- 6 National Butter and Cheese Journal, 23 (Milwaukee, Feb. 10, 1932), 8.
- 7 Guernsey Breeders' Journal, vol. 1 (Peterboro, Jan. 1, 1910); letter from L. A. Lounsbury to C. S. Hean, dated June 20, 1939, pasted in front of first volume held by University of Wisconsin; letter from L. A. Lounsbury to A. W. Hopkins, dated Nov. 8, 1951.
- 8 Guernsey Breeders' Journal, vol. 1 (Peterboro, Jan., 1910).
- 9 Milk News, 19 (Chicago, Mar., 1912), 2.
- 10 Ice Cream Trade Journal, 8 (New York, Jan., 1912), 45; Butter, Cheese and Egg Journal, 6 (Milwaukee, Sept. 29, 1915), 18; Milk Reporter, 34 (Sussex, Mar., 1918), 1.
- 11 Chicago Dairy Produce, 17 (Chicago, June 28, 1910), 4; Elgin Dairy Report, 21 (Elgin, Dec. 18, 1911), 2; Milk News, 19 (Chicago, Mar., 1912), 4; Northwest Dairyman and Horticulturist, 31 (Tacoma, Dec., 1917), 198; Charleston (S.C.) American, quoted in the Milk Reporter, 34 (Sussex, Mar., 1918), 1.

- 12 Holstein-Friesian World, 11 (Lacona, Oct. 24, 1914), 1477.
- 13 Ice Cream Trade Journal, 13 (New York, May, 1917), 45.
- 14 Butter, Cheese and Egg Journal, 1 (Milwaukee, May 17, 1910), 3; Creamery Journal, 26 (Waterloo, Oct. 1, 1915), 16.
- 15 Jersey Bulletin and Dairy World, 30 (Indianapolis, Aug. 23, 1911), 1348-49.
- 16 Butter, Cheese and Egg Journal, 6 (Milwaukee, Sept. 29, 1915), 1; Jersey Bulletin and Dairy World, 31 (Indianapolis, Nov. 27, 1912), 1961; Creamery Journal, 27 (Waterloo, June 15, 1916), 25.
- 17 Milk News, 19 (Chicago, Oct., 1911), 3; quotation from the Michigan Dairy Farmer, 5 (Detroit, Jan. 15, 1914), 13.
- 18 Jersey Bulletin, 30 (Indianapolis, Mar. 15, 1911), 381.
- 19 Chicago Dairy Produce, 17 (Chicago, Jan. 24, 1911), 3; Milk News, 19 (Chicago, Jan., 1912), 1; *ibid.* (Feb., 1912), p. 1; *ibid.* (Mar., 1912), p. 6; *ibid.*, 20 (Nov., 1912), 7.
- 20 Milk News, 20 (Chicago, Nov., 1912), 7.
- 21 New York Produce Review and American Creamery, 35 (Oct. 30, 1912), 102.
- 22 Elgin Dairy Report, 24 (Elgin, June 8, 1914), 2; Hoard's Dairyman, 49 (Ft. Atkinson, June 11, 1915), 738.
- 23 Dairy Record, 14 (St. Paul, Apr. 30, 1913), 6-7; Holstein-Friesian Register, 28 (Brattleboro, Sept. 15, 1910), 1050; Milk News, 18 (Chicago, Apr., 1911), 1; Jersey Bulletin and Dairy World, 31 (Indianapolis, Nov. 27, 1912), 1953; *ibid.*, 30 (May 24, 1911), 812.
- 24 Hoard's Dairyman, 49 (Ft. Atkinson, Apr. 9, 1915), 436, quoted from Outlook Magazine; Chicago Dairy Produce, 23 (Chicago, July 25, 1916), 6; Milk Reporter, 34 (Sussex, Sept., 1918), 1, also carried praise of the goat and noted English progressive-ness in goat husbandry. There was also an interesting comment on paternalism:
 "Goats in England.
 " 'Everywhere you go in England,' writes an American soldier to his folks, 'you see nothing but goats. The isle is alive with them.' The English must have milk and they know the cheapest and easiest means of getting a superior quality is by keeping goats. There, as here, the government is eternally boosting the goat, except that the British government has been on the boosting job much longer and there goats are much more numerous than here."
- 25 Milk Reporter, 35 (Sussex, June, 1919), 8.
- 26 Milk News, 18 (Chicago, Apr., 1911), 1.
- 27 *Ibid.*, 19 (Sept., 1911), 4.
- 28 *Ibid.*, 20 (Nov., 1912), 7; Jersey Bulletin and Dairy World, 31 (Indianapolis, Feb. 14, 1912), 252.
- 29 Milk Reporter, 29 (Sussex, Nov., 1913), 8; Elgin Dairy Report, 23 (Elgin, Jan. 19, 1914), 2; *ibid.* (Jan. 26, 1914), p. 2.
- 30 New York Produce Review and American Creamery, 35 (New York, Oct. 30, 1912), 97; Creamery Journal, 27 (Waterloo, Dec. 15, 1916), 15.

- 31 Milk Reporter, 34 (Sussex, Mar., 1918), 15.
- 32 Ice Cream Trade Journal, 13 (New York, Apr., 1917), 41, article quoted from Case and Comment.
- 33 Dairy Record, 20 (St. Paul, June 5, 1918), 10.
- 34 Pacific Dairy Review, 18 (San Francisco, Sept. 3, 1914), 774.
- 35 Holstein-Friesian World, 11 (Lacona, Dec. 5, 1914), 1738.
- 36 Brownell's Dairy Farmer, 7 (Detroit, July 15, 1915), 9.
- 37 Kimball's Dairy Farmer, 14 (Waterloo, Mar. 1, 1916), 138.
- 38 Elgin Dairy Report, 25 (Elgin, May 20, 1916), 8; Chicago Dairy Produce, 23 (Chicago, July 25, 1916), 2; *ibid.*, 23 (Sept. 26, 1916), 18-20; on the subject of pepsin as a substitute for rennet, the Elgin Dairy Report observed: "Pepsin dissolved in water will curdle satisfactory, the ripened milk used for making American cheese, but not the sweet milk used for Swiss and Limburger, and although few trials have been made it probably cannot be used for brick cheese. However, if larger quantities of pepsin can be supplied and used at American cheese factories, there will be less difficulty in supplying rennet extract for making the other varieties of cheese for which sweet milk is used." Elgin Dairy Report, 25 (Elgin, May 13, 1916), 3.
- 39 Hoard's Dairyman, 53 (Ft. Atkinson, Jan. 26, 1917), 16.
- 40 Jersey Bulletin and Dairy World, 36 (Indianapolis, Apr. 18, 1917), 586; Hoard's Dairyman, 53 (Ft. Atkinson, Apr. 20, 1917), 570; *ibid.*, (Apr. 27, 1917), 612.
- 41 Milk Reporter, 33 (Sussex, June, 1917), 4; Ice Cream Trade Journal, 13 (New York, June, 1917), 26.
- 42 Holstein-Friesian Register, 35 (Brattleboro, Dec. 15, 1917), 2242.
- 43 Milk Reporter, 33 (Sussex, July, 1917), 8.
- 44 New York Produce Review and American Creamery, 46 (New York, Aug. 28, 1918), 628; *ibid.* (July 24, 1918), p. 468; *ibid.* (Sept. 11, 1918), p. 692; *ibid.* (Oct. 9, 1918), p. 860.
- 45 Milk Reporter, 34 (Sussex, Sept., 1918), 8; the Jersey Bulletin also connected bulls and the war. As Brown advised: "Put the scrub bull into bologna. In your herd he's an ally of the Kaiser." Jersey Bulletin and Dairy World, 36 (Indianapolis, Nov. 14, 1917), 1799.
- 46 Elgin Dairy Report, 24 (Elgin, June 1, 1914), 2; Willson also had a few unkind remarks to make on government publications: "Anyone whose desk is the mecca for the large amount of publications put out by the different experiment stations, and to a large extent, the publications of the agricultural department, cannot help feeling what a weary and dreary lot of printed matter emanates from these seemingly prolific sources. Possibly some one is interested in all the printed matter that goes out but it is hard to conceive how some of it is interesting to anyone but the printer, who is getting a job out of it." *Ibid.* (June 22, 1914), p. 2.
- 47 Kimball's Dairy Farmer, 14 (Waterloo, June 1, 1916), 368; Chicago Dairy Produce, 23 (Chicago, July 25, 1916), 19-21;

Kimball's Dairy Farmer, 14 (Waterloo, Dec. 1, 1916), 762;
Brownell's Dairy Farmer, 7 (Detroit, Apr. 1, 1915), 1; New York Produce Review and American Creamery, 46 (New York, July 24, 1918), 468; ibid., 46 (Sept. 4, 1918), 660; Milk Reporter, 35 (Sussex, May, 1919), 8.

48 Ice Cream Trade Journal, 13 (New York, Mar., 1917), 46-47.

49 Elgin Dairy Report, 23 (Elgin, Jan. 19, 1914), 3.

50 Milk News, 19 (Chicago, Nov., 1911), 1; ibid., 20 (Dec., 1912), 4; ibid. (July, 1912), p. 1.

51 Butter, Cheese and Egg Journal, 6 (Milwaukee, Jan. 13, 1915), 9, · quoted from the Denver Post.

52 Milk Reporter, 35 (Sussex, Dec., 1919), 10.

53 ibid., 30 (May, 1914), 8.

54 Creamery Journal, 27 (Waterloo, Oct. 15, 1916), 13; Dairy Record, 18 (St. Paul, Feb. 28, 1917), 8. Hoof and mouth disease apparently had some effect on the demand for pasteurization. As J. C. Joslin remarked: "Why should we pasteurize? I think this is a very important subject and the question arises, why? I believe there are several reasons. In the first place, on account of sanitation from a health standpoint, especially now that foot and mouth disease is so prevalent. City people are asking health officers what they should do and these health officers are telling them to use nothing but pasteurized dairy products. Out here in the country we do not appreciate the fact, but in the cities this question is coming up. Dr. Evans says there is nothing as important right now as pasteurization." Creamery Journal, 26 (Waterloo, Feb. 1, 1915), 9.

55 Hoard's Dairyman, quoted in Colorado Dairyman, 5 (Denver, June, 1913), 3-4; Milk Reporter, 29 (Sussex, Nov., 1913), 8.

56 Elgin Dairy Report, 23 (Elgin, Jan. 30, 1913), 2; Butter, Cheese and Egg Journal, 6 (Milwaukee, Nov. 3, 1915), 2; as Stanton of the Milk Reporter caustically observed:

"In the old days some members of the milk industry made their profit by watering or skimming milk; the use of certain preservatives to keep milk from getting sour, and sometimes they doctored their cream with viscogen, gelatine and condensed skimmed milk.

"But, the modern milk dealer has emerged from the dark ages, and comes forth into daylight as an honest man laying claim to public confidence, because he is engaged in selling a good product on its merits alone.

"Just as we have persuaded ourselves that this is true, and that the breed of milk dealers is improving rapidly as the breed of dairy cattle, we find ourselves shocked by the news that comes from Ohio that some members of the industry have discovered a new trick by which the cream line on the glass bottles can be made to appear a half inch or more deeper, without any real addition of cream.

"The trick consists simply in homogenizing the cream...."

Milk Reporter, 31 (Sussex, Feb., 1915), 8.

57 Milk Reporter, 31 (Sussex, Feb., 1915), 8.

- 58 Ibid., 33 (June, 1917), 11.
- 59 Dairy Record, 14 (St. Paul, Sept. 18, 1912), 5; ibid., 20 (Oct. 2, 1918), 8.
- 60 Dairy Record, 18 (St. Paul, 1916), 6; Milk Reporter, 32 (Sussex, Mar., 1916), 9; Chicago Dairy Produce, 17 (Chicago, June 28, 1910), 30.
- 61 New York Produce Review and American Creamery, 35 (New York, Dec. 11, 1912), 370; Elgin Dairy Report, 25 (Elgin, May 27, 1916), 2; quotation from Chicago Dairy Produce, 23 (Chicago, Apr. 17, 1917), 1.
- 62 Chicago Dairy Produce, 23 (Chicago, Apr. 17, 1917), 1; New York Produce Review and American Creamery, 46 (New York, May 8, 1918), 38.
- 63 Chicago Dairy Produce, 17 (Chicago, Nov. 15, 1910), 2-3; Chicago Dairy Produce, 17 (Chicago, Jan. 24, 1911), 2; Elgin Dairy Report, 22 (Elgin, Jan. 13, 1913), 2; ibid. (Feb. 3, 1913), p. 2; ibid. (Jan. 13, 1913), p. 2; Dairy Record, 14 (St. Paul, Apr. 23, 1913), 6; Elgin Dairy Report, 22 (Elgin, Feb. 3, 1913), 2; Chicago Dairy Produce, 23 (June 27, 1916), 2.
- 64 American Cheesemaker, 24 (Grand Rapids, Feb., 1910), 1.
- 65 Milk Reporter, 31 (Sussex, Mar., 1913), 8; American Cheesemaker, 29 (Grand Rapids, Nov., 1914), 4; Pacific Dairy Review, 18 (San Francisco, Nov. 19, 1914), 1035; Milk Reporter, 32 (Sussex, Mar., 1916), 8; ibid., 34 (Mar., 1918), 5.
- 66 Chicago Dairy Produce, 17 (Chicago, June 28, 1910), 2; Ice Cream Trade Journal, 8 (New York, Apr., 1912), 42-44.
- 67 Jersey Bulletin and Dairy World, 30 (Indianapolis, Dec. 13, 1911), 2036; ibid., 31 (May 8, 1912), 763.
- 68 Dairy Record, 14 (St. Paul, Jan. 29, 1913), 2; ibid., 13 (June 26, 1912), 16; Pacific Dairy Review, 18 (San Francisco, Feb. 5, 1914), 60-62.
- 69 Jersey Bulletin and Dairy World, 36 (Indianapolis, Jan. 31, 1917), 150.
- 70 Milk Reporter, 31 (Sussex, Feb., 1915), 5; Elgin Dairy Report, 23 (Elgin, Feb. 2, 1914), 2; New York Produce Review and American Creamery, 46 (New York, Sept. 4, 1918), 660; Ice Cream Trade Journal, 8 (New York, Aug., 1912), 41.
- 71 Ice Cream Trade Journal, 8 (New York, Jan., 1912), 44; ibid. (Apr., 1912), p. 56; Butter, Cheese and Egg Journal, 6 (Milwaukee, Apr. 7, 1915), 31; Elgin Dairy Report, 25 (Elgin, May 27, 1916), 2; Hoard's Dairyman, commented on by the Dairy Record, 18 (St. Paul, June 14, 1916), 9; Kimball's Dairy Farmer, 14 (Waterloo, Jan. 15, 1916), 29; Ice Cream Trade Journal, 13 (New York, Jan., 1917), 21.
- 72 Elgin Dairy Report, 22 (Elgin, June 17, 1912), 2; ibid., 23 (June 2, 1913), 2; Holstein-Friesian World, 11 (Madison, Aug. 8, 1914), 1033.
- 73 Dairy Record, 18 (St. Paul, May 16, 1917), 8; Butter Cheese and Egg Journal, 1 (Milwaukee, Feb. 2, 1910), 3; Dairy Record, 19 (St. Paul, Mar. 19, 1919), 9; ibid., vol. 20 (June 5, 1918); discrepancies in volume numbering result from a mistake of

- the publisher); Milk News, 19 (Chicago, Dec., 1911), 6; Dairy Record, 14 (St. Paul, Apr. 30, 1913), 4.
- 74 Dairy Record, 18 (St. Paul, July 12, 1916), 10; ibid., 18 (Oct., 11, 1916), 8. Under laissez-faire economic theory every entrepreneur should have full (or as nearly so as possible) knowledge of the market, and when he discovers that there are better profits elsewhere, he is supposed to invest in some other enterprise. Similarly, workers are supposed to have nearly full knowledge of labor conditions, and when they are underpaid in one line of endeavor are supposed in capitalistic theory to go to work in higher paid jobs. In line with this theory, as full market statistics as can be obtained have been provided by the government for entrepreneurs so that they and other businessmen can judge economic trends. Workers, however, have seldom been able to secure similar statistics. The request of the Dairy Record was reasonable only from a theoretic standpoint; employers have usually opposed making wage information available to the public.
- 75 Jersey Bulletin and Dairy World, 30 (Indianapolis, Sept. 13, 1911), 1492; quotation from the Michigan Dairy Farmer, 5 (Detroit, Jan. 15, 1914), 8.
- 76 Pacific Dairy Review, 18 (San Francisco, July 9, 1914), 580.
- 77 Milk Reporter, 33 (Sussex, June, 1917), 3; Hoard's Dairyman, 53 (Ft. Atkinson, Apr. 27, 1917), 612; Holstein-Friesian Register, 35 (Brattleboro, July 1, 1917), 1251; Dairy Record, 20 (Oct. 2, 1918), 9.
- 78 Hoard's Dairyman, 49 (Ft. Atkinson, Feb. 26, 1915), 172.
- 79 Dairy Record, 14 (St. Paul, Mar. 12, 1913), 2; Milk Reporter, 29 (Sussex, July, 1913), 4.
- 80 Hoard's Dairyman, 49 (Ft. Atkinson, Feb. 5, 1915), 43; Brownell's Dairy Farmer, 7 (Detroit, Jan. 1, 1916), 6.
- 81 Northwest Dairyman and Horticulturist, 31 (Tacoma or Seattle?, 1917), 182.
- 82 Ibid., 32 (Jan., 1918), 4; Dairy Record, 19 (St. Paul, Nov. 27, 1918), 26.
- 83 Chicago Dairy Produce, 17 (Chicago, June 28, 1910), 6; Ice Cream Trade Journal, 13 (New York, June, 1917), 33; Elgin Dairy Report, 21 (Elgin, Dec. 30, 1911), 2; Butter, Cheese and Egg Journal, 11 (Milwaukee, Sept. 13, 1910), 3; ibid., 6 (June 23, 1915), 20; Dairy Record, 14 (St. Paul, Apr. 2, 1913), 6.
- 84 Hoard's Dairyman, 53 (Ft. Atkinson, Feb. 2, 1917), 60; Dairy Record, 13 (St. Paul, June 19, 1912), 10; Butter, Cheese and Egg Journal, 6 (Milwaukee, May 5, 1915), 2.
- 85 Butter, Cheese and Egg Journal, 1 (Milwaukee, Aug. 16, 1910), 1.
- 86 Chicago Dairy Produce, 17 (Chicago, Jan. 24, 1911), 2.
- 87 Dairy Record, vol. 13 (St. Paul, June 12, 1912); italics added.
- 88 See Creamery Journal, 26 (Waterloo, Dec. 15, 1915), 14.
- 89 Chicago Dairy Produce, 23 (Chicago, June 27, 1916), 6; Butter, Cheese and Egg Journal, 6 (Milwaukee, Feb. 17, 1915), 17; Live Stock and Dairy Journal, 14 (Sacramento, July, 1915), 3-4; Butter, Cheese and Egg Journal, 6 (Milwaukee, May 26,

- 1915), 1; Jersey Bulletin and Dairy World, 31 (Indianapolis, May 8, 1912), 760; Dairy Record, 14 (St. Paul, July 17, 1912), 5; Elgin Dairy Report, 21 (Elgin, Dec. 18, 1911), 2; Hoard's Dairyman, 53 (Ft. Atkinson, Feb. 2, 1917), 60; Chicago Dairy Produce, 23 (Chicago, June 27, 1916), 2; Dairy Record, 18 (St. Paul, June 7, 1916), 9.
- 90 Dairy Record, 18 (St. Paul, June 7, 1916), 9.
- 91 Elgin Dairy Report, 21 (Elgin, July 24, 1911), 2; New York Produce Review and American Creamery, 35 (Feb. 19, 1913), 766; Dairy Record, 18 (St. Paul, Apr. 25, 1917), 7; American Cheese-maker, 28 (Grand Rapids, Apr., 1913), 2.
- 92 Butter, Cheese and Egg Journal, 6 (Milwaukee, Jan. 27, 1915), 18.
- 93 On substitutes for butter, New York Produce Review and American Creamery, 35 (New York, Oct. 30, 1912), 120; Pacific Dairy Review, 18 (San Francisco, May 7, 1914), 366; Butter, Cheese and Egg Journal, 6 (Milwaukee, Apr. 7, 1915), 1; on ice cream as food, *ibid.* (Jan. 27, 1915), p. 22; details on manufacture, New York Produce Review and American Creamery, 46 (New York, May 15, 1918), 96.
- 94 Dairy Record, 14 (St. Paul, Dec. 11, 1912), 7; New York Produce Review and American Creamery, 35 (New York, Oct. 23, 1912), 2; Butter, Cheese and Egg Journal, 6 (Milwaukee, July 14, 1915), 27; Ice Cream Trade Journal, 8 (New York, Apr., 1912), 55.
- 95 Minnesota Dairyman, 5 (Northfield, May, 1910), 8.
- 96 Butter, Cheese and Egg Journal, 1 (Milwaukee, Mar. 1, 1910), 1.
- 97 Chicago Dairy Produce, 17 (Chicago, Nov. 22, 1910), 2; Holstein-Friesian Register, 28 (Brattleboro, July 1, 1910), 786; Jersey Bulletin and Dairy World, 31 (Indianapolis, July 3, 1912), 1102; Elgin Dairy Report, 22 (Elgin, Aug. 19, 1912), 2; Dairy Record, 14 (St. Paul, Sept. 11, 1912), 8.
- 98 Elgin Dairy Report, 23 (Elgin, June 23, 1913), 2; Pacific Dairy Review, 18 (San Francisco, Mar. 5, 1914), 150-51.
- 99 Hoard's Dairyman, 49 (Ft. Atkinson, Apr. 9, 1915), 436.
- 100 *Ibid.*
- 101 Chicago Dairy Produce, 23 (Chicago, Mar. 27, 1917), 2; Holstein-Friesian Register, 35 (Brattleboro, Dec. 15, 1917), 2243; but the discovery of vitamins was "scientific" and hence beyond argument.
- 102 Chicago Dairy Produce, 23 (Chicago, Feb. 13, 1917), 2.
- 103 Holstein-Friesian Register, 28 (Brattleboro, Sept. 15, 1910), 1050; *ibid.* (Jan. 1, 1910), p. 9; Jersey Bulletin and Dairy World, 31 (Indianapolis, Apr. 3, 1912), 527.
- 104 On motion pictures, Jersey Bulletin and Dairy World, 36 (Indianapolis, Jan. 31, 1917), 158; *ibid.* (Apr. 18, 1917), 590; on the World's Fair of 1893, Guernsey Breeders' Journal, 1 (Peterboro, Apr., 1910), 3; Jersey Bulletin and Dairy World, 31 (Indianapolis, Nov. 20, 1912), 1916.
- 105 Minnesota Dairyman, 9 (Northfield, Apr., 1914), 12; Pacific Dairy Review, 18 (San Francisco, Feb. 5, 1914), 54.

- 106 Histories and descriptions, see for some examples Kimball's Dairy Farmer, 14 (Waterloo, Feb. 15, 1916), 85; Chicago Dairy Produce, 23 (Chicago, Sept. 26, 1916), 32; Milk News, 18 (Chicago, Apr., 1911), 7; ibid., 19 (Oct., 1911), 3; on coöperative breed associations, New York Produce Review and American Creamery, 35 (New York, Mar. 12, 1913), 882; Pacific Dairy Review, 18 (San Francisco, Jan. 14, 1915), 1230; Kimball's Dairy Farmer, 14 (Waterloo, Jan. 15, 1916), 15.
- 107 Hoard's Dairyman, 49 (Ft. Atkinson, Feb. 26, 1915), 172.
- 108 Pacific Dairy Review, quoted in the Elgin Dairy Report, 22 (Elgin, July 29, 1912), 2; Pacific Dairy Review, 18 (San Francisco, Mar. 5, 1914), 151-52.
- 109 Jersey Bulletin and Dairy World, 31 (Indianapolis, Nov. 27, 1912), 1961; Northwest Dairyman, 9 (Northfield, June, 1914), 13; Hoard's Dairyman, 49 (Ft. Atkinson, June 11, 1915), 738; Dairy Record, 20 (St. Paul, June 5, 1918), 12.
- 110 Colorado Dairyman, 5 (Denver, June, 1913), 2; Brownell's Dairy Farmer, 7 (Detroit, July 15, 1915), 10; Milk Reporter, 30 (Sussex, Apr., 1914), 9; Holstein-Friesian Register, 35 (Brattleboro, Mar. 15, 1917), 542; Hoard's Dairyman, 53 (Ft. Atkinson, Apr. 13, 1917), 526.
- 111 Holstein-Friesian World, 11 (Lacona, Dec. 5, 1914), 1742; Pacific Dairy Review, 18 (San Francisco, Nov. 19, 1914), 1034; Guernsey Breeders' Journal, 17 (Peterboro, Jan., 1915), 16; Butter, Cheese and Egg Journal, 6 (Milwaukee, Jan. 13, 1915), 36; Milk Reporter, 31 (Sussex, Mar., 1915), 1; In 1915 the Guernsey Breeders' Journal amplified breeder complaints about quarantine laws:
- "Every cloud has a silver lining, and what is one man's loss proves in nearly every case to be another's gain. At least this has been one result of the foot and mouth quarantine which was placed for so many weeks upon a large portion of the United States.
-
- "The fact that during a greater portion of the winter—which is the time when a large number of bulls are sold,—no cattle could be shipped has caused a surplus of bulls on the farms of nearly every Guernsey breeder where the usual reply to inquiries at this time of year is, 'Sorry, but I am all sold out.' This surplus is proving to be expensive keeping and now that stock is moving easier breeders are offering bulls at attractive prices to the general farmer and dairyman, thus affording him an opportunity which in all probability will prove to be a rare one." Guernsey Breeders' Journal, 7 (Peterborough, Sept., 1915), 23.
- 112 Livestock and Dairy Journal, 14 (Sacramento, Sept., 1915), 7; Brownell's Dairy Farmer, 7 (Detroit, Mar. 1, 1916), 1, 2, 7, 8, 10, 11, 12, 13, 14; Kimball's Dairy Farmer, 14 (Waterloo, Mar. 15, 1916), 178; Holstein-Friesian Register, 35 (Brattleboro, Sept. 1, 1917), 1589-90.

Chapter 11

- 1 See Appendix B for more information on these periodicals which appeared between 1919 and 1929.
- 2 See previous chapters.
- 3 Dairy Produce, vol. 34 (Chicago, Oct. 11, 1927); Hoard's Dairyman, 71 (Ft. Atkinson, Feb. 26, 1926), 230.
- 4 Butter, Cheese and Egg Journal, 11 (Milwaukee, Oct. 27, 1920), 2; quotation from the Pacific Dairy Review, 26 (San Francisco, Feb. 2, 1922), 6.
- 5 Holstein-Friesian Register, 41 (Brattleboro, Jan. 1, 1923), 26; Jersey Bulletin and Dairy World, 43 (Indianapolis, Jan. 2, 1924), 14; *ibid.* (Jan. 23, 1924), p. 145; *ibid.* (Feb. 20, 1924), p. 316; *ibid.* (June 18, 1924), p. 1163; Holstein-Friesian World, 22 (Lacona, Aug. 15, 1925), 1370-71; *ibid.* (Sept. 5, 1925), p. 1468.
- 6 Dairy Farmer, 25 (Des Moines, Jan. 15, 1927), 8.
- 7 New York Produce Review and American Creamery, 57 (New York, Apr. 30, 1924), 1202.
- 8 Creamery Journal, 37 (Waterloo, May, 1926), 6; New York Produce Review and American Creamery, 67 (Apr. 17, 1929), 1232; Milk Reporter, 42 (Sussex, Jan., 1926), 17; quotation from Northwest Dairyman and Farmer, 42 (Seattle, Wash., Feb., 1927), 24; on dairying and the depression also see the Pacific Dairy Review, 26 (San Francisco, Feb. 2, 1922), 6.
- 9 On milk strikes, Pacific Dairy Review, 31 (San Francisco, Jan., 1927), 7; New York Produce Review and American Creamery, 67 (New York, Jan. 23, 1929), 537; Dairy Produce, 35 (Chicago, Jan. 22, 1929), 5; *ibid.*, 35 (Dec. 4, 1928), 18; on dairy income, Dairy Farmer, 27 (Des Moines, Feb., 1929), 18; Jersey Bulletin and Dairy World, 48 (Indianapolis, Mar. 27, 1929), 579.
- 10 Dairy Farmer, 21 (Des Moines, Mar. 1, 1923), 8.
- 11 Northwest Dairyman and Farmer, 41 (Seattle, Aug., 1927), 127.
- 12 Butter, Cheese and Egg Journal, 11 (Milwaukee, Dec. 22, 1920), 3; Ice Cream Trade Journal, 17 (New York, Jan., 1921), 77.
- 13 Chicago Dairy Produce, 26 (Chicago, Sept. 16, 1919), 4. The articles on evaporated milk were identical for both the Milk Reporter and the Jersey Bulletin. The former, however, credited the American Food Journal, while the latter credited the University of Minnesota. It seems probable that the University was the primary source.
- 14 Pacific Dairy Review, 26 (San Francisco, Nov. 23, 1922), 7.
- 15 Dairy Farmer, 21 (Des Moines, Aug. 15, 1923), 9; Holstein-Friesian Register, 41 (Brattleboro, Sept. 1, 1923), 931, quoted from the Rural New Yorker.
- 16 New York Produce Review and American Creamery, 57 (New York, Jan. 16, 1924), 442; Dairy Record, 25 (St. Paul, June 25, 1924), 6.
- 17 Dairy Produce, 35 (Chicago, Jan. 2, 1929), 5.
- 18 Ice Cream Trade Journal, 23 (New York, Oct., 1927), 67-68.
- 19 Pacific Dairy Review, 32 (San Francisco, Aug., 1928), 24.
- 20 Butter, Cheese and Egg Journal, 11 (Milwaukee, May 5, 1920),

2; Ice Cream Trade Journal, 17 (New York, Nov., 1921), 84; Pacific Dairy Review, 26 (San Francisco, May 11, 1922), 6-7; ibid. (Jan. 5, 1922), p. 11.

- 21 For an example of a common complaint see Dairy Produce, 35 (Chicago, Sept. 4, 1928), 9; quotation from ibid., p. 3. In August 28, 1928, Dairy Produce noted the increasing diversification in the dairy industry. The journal noted on page 6 that:

"One of our largest creamery companies has been getting into the milk industry and at the same time extending their creamery interests. Asked for the reason for this move on their part they gave one reason with which all are familiar, namely: 'We don't want to have all our eggs in one basket.' It is that feeling that is spreading so rapidly that we can expect to see at no distant day all our large creamery companies engaged with side-lines. Only an occasional small creamery will be exclusively a buttermaking plant.

"One of our largest creameries is an important factor in the handling of canned goods, and another is manufacturing mayonnaise, relishes, etc. A great many creameries, and the number is increasing, are handling eggs and some both eggs and poultry, and of course, most of the successful creameries are taking care of their buttermilk, making a commercial product where formerly there was waste."

- 22 Chicago Dairy Produce, 26 (Chicago, Nov. 18, 1919), 4; Butter, Cheese and Egg Journal, 11 (Milwaukee, Mar. 31, 1920), 12; New York Produce Review and American Creamery, 57 (New York, Nov. 7, 1923), 2.
- 23 Pacific Dairy Review, 26 (San Francisco, Feb. 16, 1922), 7.
- 24 Hoard's Dairyman, 71 (Ft. Atkinson, Nov. 10, 1926), 1982.
- 25 Ibid., 62 (Dec. 2, 1921), 584-85.
- 26 Northwest Dairyman and Horticulturist, 34 (Seattle, Wash., Apr., 1920), 8; Hoard's Dairyman, 62 (Ft. Atkinson, Sept. 30, 1921), 286; see also ibid., 71 (Mar. 10, 1926), 269.
- 27 Milk Reporter, 42 (Sussex, Jan., 1926), 8.
- 28 Pacific Dairy Review, 26 (San Francisco, Feb. 23, 1922), 6; Creamery Journal, 36 (Waterloo, June 15, 1925), 15; Dairy Record, 25 (St. Paul, Mar. 4, 1925), 6; Butter, Cheese and Egg Journal, 17 (Milwaukee, Jan. 6, 1926), 3.
- 29 New York Produce Review and American Creamery, 57 (New York, Nov. 28, 1923), 130.
- 30 Dairy Farmer, 25 (Des Moines, Nov., 1927), 10.
- 31 Pacific Dairy Review, 26 (San Francisco, Jan. 5, 1922), 6; Creamery Journal, 36 (Waterloo, Sept. 15, 1925), 17; also see entries down to and including footnote 30.
- 32 Pacific Dairy Review, 26 (San Francisco, Sept. 21, 1922), 6.
- 33 Dairy Record, 25 (St. Paul, Apr. 22, 1925), 5; Hoard's Dairyman, 71 (Ft. Atkinson, Oct. 23, 1926), 1036; Dairy Produce, 35 (Chicago, Apr. 23, 1929), 6.
- 34 New York Produce Review and American Creamery, 67 (New York, Jan. 30, 1929), 582.
- 35 Ibid.

- 36 Chicago Dairy Produce, 26 (Chicago, June 10, 1919), 4.
- 37 Northwest Dairyman and Farmer, 35 (Seattle, Mar., 1921), 48; ibid., 42 (Feb., 1927), 22; Pacific Dairy Review, 26 (San Francisco, Oct. 19, 1922), 6.
- 38 Pacific Dairy Review, 30 (San Francisco, Sept., 1926), 18.
- 39 New York Produce Review and American Creamery, 57 (New York, Apr. 23, 1924), 1154.
- 40 Pacific Dairy Review, 32 (San Francisco, May, 1928), 2; Dairy Produce, 35 (Chicago, Oct. 9, 1928), 6; Northwest Dairyman and Horticulturist, 34 (Seattle, Mar., 1920), 5; Hoard's Dairyman, 62 (Ft. Atkinson, Aug., 26, 1921), 135; Dairy Farmer, 20 (Des Moines, Oct. 15, 1922), 8; ibid. (Jan. 1, 1923), p. 9.
- 41 Holstein-Friesian World, 17 (Lacona, Sept. 4, 1920), 4271; quotation from Hoard's Dairyman, 62 (Ft. Atkinson, Nov. 11, 1921), 496.
- 42 Hoard's Dairyman, 62 (Ft. Atkinson, Dec. 2, 1921), 584; Dairy Farmer, 20 (Des Moines, Oct. 15, 1922), 9; Dairy Record, 25 (St. Paul, Oct. 29, 1924), 7.
- 43 Pacific Dairy Review, 26 (San Francisco, Jan. 5, 1922), 13; New York Produce Review and American Creamery, 57 (New York, Jan. 16, 1924), 459; Northwest Dairyman and Farmer, 40 (Seattle, Oct., 1926), 166.
- 44 Butter, Cheese and Egg Journal, 11 (Milwaukee, Jan. 21, 1920), 2.
- 45 Dairy Produce, 35 (Chicago, Jan. 22, 1929), 5.
- 46 Ice Cream Trade Journal, 17 (New York, Apr., 1921), 52; Dairy Farmer 21 (Des Moines, Jan. 1, 1923), 10; ibid. (Nov. 1, 1923), p. 8; Pacific Dairy Review, 26 (San Francisco, May 25, 1922), 13; ibid. (July 27, 1922), p. 7; Hoard's Dairyman, 71 (Ft. Atkinson, Apr. 10, 1926), 408.
- 47 Live Stock and Dairy Journal, vol. 14 (Sacramento, Feb., 1915); Hoard's Dairyman, 71 (Ft. Atkinson, Jan. 22, 1926), 57; Northwest Dairyman and Farmer, 41 (Seattle, Aug., 1927), 124; Jersey Bulletin and Dairy World, 43 (Indianapolis, May 14, 1924), 892.
- 48 Northwest Dairyman and Farmer, 43 (Seattle, Jan., 1929), 3.
- 49 Pacific Homestead, quoted in Northwest Dairyman and Farmer, 40 (Seattle, Jan., 1926), 7.
- 50 Butter, Cheese and Egg Journal, 17 (Milwaukee, Apr., 1926), 2-3.
- 51 Jersey Bulletin and Dairy World, 48 (Indianapolis, June 26, 1929), 1236; Dairy Farmer, 25 (Des Moines, Oct., 1927), 17; Pacific Dairy Review, 26 (San Francisco, Sept. 21, 1922), 10; Guernsey Breeders' Journal, 29 (Peterboro, Jan. 1, 1926), 15; Dairy Produce, 35 (Chicago, Jan. 15, 1929), 11.
- 52 Butter, Cheese and Egg Journal, 11 (Milwaukee, Sept. 1, 1920), 16; Chicago Dairy Produce, 26 (Chicago, Feb. 3, 1920), 16; Dairy Record, 25 (St. Paul, June 25, 1924), 8; ibid. (Jan. 28, 1925), p. 12.
- 53 Jersey Bulletin and Dairy World, 48 (Indianapolis, May 15, 1929), 921; quotation from Butter, Cheese and Egg Journal, 17

- (Milwaukee, June 23, 1926), 3; more on the same subject, ibid. (May 19, 1926), p. 3; the editors thus seemed less confident of their knowledge than formerly and perhaps sensitive about their contributions to the industry. In 1928 the Pacific Dairy Review noted: "M. D. Munn, president of National Dairy Council, speaking at the annual meeting in Chicago said: 'I sometimes feel that perhaps this industry doesn't appreciate the importance and value of the dairy press of this country. We in the Council organization realize fully the wonderful service that this press has performed, the stability and expansion that they have given to the industry. The constructive methods they have presented in building up this industry on the production as well as the marketing side, I feel, has never been fully recognized in the industry'" Pacific Dairy Review, 32 (San Francisco, Jan., 1928), 26.
- 54 Dairy Produce, 35 (Chicago, May 15, 1928), 19; Dairy Farmer, 27 (Des Moines, Feb., 1929), 4; Northwest Dairyman and Farmer, 43 (Seattle, June, 1929), 14.
- 55 Hoard's Dairyman, 71 (Ft. Atkinson, Apr. 10, 1926), 408.
- 56 Pacific Dairy Review, vol. 31 (San Francisco, May, 1927); Dairy Produce, 35 (Chicago, May 15, 1928), 11; quotation from New York Produce Review and American Creamery, 57 (New York, Nov. 28, 1923), 134.
- 57 Jersey Bulletin and Dairy World, 43 (Indianapolis, Apr. 30, 1924), 788; Holstein-Friesian World, 22 (Lacona, Sept. 5, 1925), 1468; Pacific Dairy Review, 32 (San Francisco, Oct., 1928), 52.
- 58 Jersey Bulletin and Dairy World, 38 (Indianapolis, Mar. 26, 1919), 524; Pacific Dairy Review, 26 (San Francisco, Aug. 31, 1922), 8; Creamery Journal, 36 (Waterloo, Feb. 1, 1925), 15; Hoard's Dairyman, 71 (Ft. Atkinson, Apr. 10, 1926), 408; ibid. (Jan. 29, 1926), p. 84.
- 59 Hoard's Dairyman, 71 (Ft. Atkinson, Jan. 22, 1926), 46.
- 60 Holstein-Friesian Register, 44 (Brattleboro, Mar. 1, 1926), 214; Pacific Dairy Review, 31 (San Francisco, Mar., 1927), 28; Milk Reporter, 43 (Sussex, Mar., 1927), 1; Dairy Produce, 35 (Chicago, May 15, 1928), 6, 29.
- 61 Northwest Dairyman and Farmer, 43 (Seattle, Dec., 1929), 6.
- 62 Milk Reporter, 42 (Sussex, Feb., 1926), 8.
- 63 Jersey Bulletin and Dairy World, 48 (Indianapolis, Feb. 13, 1929), 293.
- 64 New York Produce Review and American Creamery, 67 (New York, Mar. 27, 1929), 1096.
- 65 On silos see, for example, Pacific Dairy Review, 26 (San Francisco, Feb. 2, 1928), 1; Dairy Farmer, 21 (Des Moines, Aug. 1, 1923), 10; on wire and nails, Pacific Dairy Review, 26 (San Francisco, Mar. 9, 1922), 20; Milk Reporter, 42 (Sussex, Oct., 1926), 8; on bitterweed, Jersey Bulletin and Dairy World, 48 (Indianapolis, Mar. 27, 1929), 579; on sweet clover see Hoard's Dairyman, 71 (Ft. Atkinson, Mar. 10, 1926), 282.
- 66 On vitamins, see Hoard's Dairyman, 62 (Ft. Atkinson, July 22, 1921), 9; on general feeding advice see, for example, "PEANUT

- MEAL FOR DAIRY COWS," Jersey Bulletin and Dairy World, 38 (Indianapolis, Dec. 3, 1919), 2475; "WINTER RATIONS FOR DAIRY COWS," Butter, Cheese and Egg Journal, 11 (Milwaukee, Jan. 7, 1920), 6; "HAY FROM IMMATURE ALFALFA," Pacific Dairy Review, 26 (San Francisco, July 27, 1922), 6; "START RIGHT THIS FALL," Dairy Farmer, 21 (Des Moines, Nov. 1, 1923), 8; "California Dairymen Hit by High Alfalfa Price," Dairy Record, 25 (St. Paul, June 25, 1924), 36; "GROUND SOY-BEANS ARE BEST IN DAIRY RATION," Jersey Bulletin and Dairy World, 43 (Indianapolis, Feb. 13, 1924), 296; and an article on succulent feeds in the Creamery Journal, 36 (Waterloo, Feb. 1, 1925), 22.
- 67 Northwest Dairyman and Farmer, 36 (Seattle, Apr., 1922), 63; Jersey Bulletin and Dairy World, 43 (Indianapolis, Jan. 23, 1924), 154; Dairy Farmer, 27 (Des Moines, Jan., 1929), 9; quotation from *ibid.*, p. 8.
- 68 Hoard's Dairyman, 71 (Ft. Atkinson, July 10, 1926), 706.
- 69 Dairy Farmer, 20 (Des Moines, Oct. 15, 1922), 7; Pacific Dairy Review, 26 (San Francisco, Apr. 6, 1922), 7.
- 70 Pacific Dairy Review, 26 (San Francisco, Jan. 5, 1922), 10-11.
- 71 Holstein-Friesian Register, 44 (Brattleboro, Feb. 1, 1926), 103; quotation from the Dairy Farmer, 21 (Des Moines, Aug. 1, 1923), 8. Regarding this editorial it is interesting to note that four years later the editor reused his observation of 1923. This practice was not uncommon for many dairy papers. In 1927 the editor wrote: "The other day I met a fellow who said he didn't want to make any more money. He said the politicians and grafters get it all anyway. He was milking a bunch of cows and I noticed he had almost every color of the rainbow in that herd. He is in a fair way to get his wish." *Ibid.*, 25 (Nov., 1927), 10.
- Goss also noted that scrub cows sometimes became quite valuable. He wrote in 1923:
- "The claim agents of railroads have found in settlement for losses that when a scrub cow is crossed with a purebred locomotive her value is sometimes doubled. Tho she is dead, she is 'worth' considerably more than ever before, if the claim of the owner is any criterion.
- "If a locomotive can make a dead scrub cow so valuable, what are the possibilities when a purebred sire is used instead? He adds no value to the scrub cow, that is certain, but the offspring is improved and that is the forward looking thought of value." *Ibid.*, 21 (Mar. 1, 1923), 9.
- 72 Jersey Bulletin and Dairy World, 38 (Indianapolis, Oct. 8, 1919), 1993; Dairy Farmer, 20 (Des Moines, Oct. 15, 1922), 14, 15, 23.
- 73 As an example of boosting, the Jersey Bulletin and Dairy World, 38 (Indianapolis, Mar. 19, 1919), 500, carried the following: "The Jersey cow's a thing of charm; she lifts the mortgage from the farm and makes the farmer's life more sweet and sets him down on Easy Street. Where'er the Jersey cow is queen, a country prosperous is seen, and dairymen in joyful ranks are packing bullion to the banks. Why plug along the sad

old way, producing nutmegs, prunes and hay, and putting up the bankrupt's wail, if one year's crop should chance to fail? There is a better method now—the method of the Jersey cow; this critter always earns her keep, and piles up riches while you sleep, and pays the taxes and the rents; and here in Crawford county, Gents, we have the climate and the feed, and all conditions dairies need. So let us boost the Jersey cow, which beats the old breach-loading plow. Let's take up dairies, milk and cream, the safest money-making scheme.—(Apologies to Walt Mason)". This verse had apparently been widely distributed in Indiana as part of a boosters' campaign.

- 74 On quality cattle, Holstein-Friesian Register, 33 (Brattleboro, Jan. 15, 1926), 71; Holstein-Friesian World, 22 (Lacona, Sept. 19, 1925), 1540. Local, personal and promotional, "A WARNING FROM TEXAS," Guernsey Breeders' Journal, 29 (Peterboro, Mar. 15, 1926), 265; "SIDELIGHTS ON THE MICHIGAN PICNIC TOUR," Holstein-Friesian World, 17 (Lacona, Sept. 4, 1920), 4296; article on history of the Guernsey Breeders' Journal, 15 (Peterboro, Mar. 1, 1919), 146; "ITS ALWAYS A HOLSTEIN," Holstein-Friesian Register, 41 (Brattleboro, June 15, 1923), 651; "What's in a Name?" Guernsey Breeders' Journal, 29 (Peterboro, 1929), 256-57, 312-13, 370; on the theory of Guénon see Jersey Bulletin and Dairy World, 38 (Indianapolis, July 9, 1919), 1271.
- 75 Jersey Bulletin and Dairy World, 38 (Indianapolis, Sept. 24, 1919), 1816; *ibid.* (Jan. 1, 1919), p. 23; Pacific Dairy Review, 31 (San Francisco, Mar., 1927), 28; Hoard's Dairyman, 71 (Ft. Atkinson, Apr. 25, 1926), 466; Northwest Dairyman and Farmer, 41 (Seattle, Aug., 1927), 6.
- 76 Dairy Farmer, 25 (Des Moines, Oct., 1927), 6.
- 77 Northwest Dairyman and Farmer, 43 (Seattle, Jan., 1929), 11; Hoard's Dairyman, 71 (Ft. Atkinson, Apr. 25, 1926), 466; Northwest Dairyman and Farmer, 41 (Seattle, Aug., 1927), 126.
- 78 Dairy Record, 19 (St. Paul, May 21, 1919), 3; Butter, Cheese and Egg Journal, 11 (Milwaukee, Jan. 7, 1920), 2; Hoard's Dairyman, 71 (Ft. Atkinson, June 25, 1926), 672; Butter, Cheese and Egg Journal, 17 (Milwaukee, Jan. 6, 1926), 2; Dairy Farmer, 21 (Des Moines, Aug. 15, 1923), 16-17.
- 79 Ice Cream Trade Journal, 17 (New York, Jan., 1921), 76; Pacific Dairy Review, 32 (San Francisco, Aug., 1928), 18.

Chapter 12

- 1 The Northwest Dairyman and Farmer of Seattle failed in 1932. The title changes of two of the more fortunate papers in the depression years can best be demonstrated with a chart:

New York Produce Review and American Creamery
(1897-1929)

American Creamery and Poultry Produce Review
(1930-37)

American Produce Review
(1937-39)

American Milk
Review
(1939-)

American Egg and
Poultry Review
(1939-)

American Butter
Review
(1939-)

American Butter &
Cheese Review
(1948-)

Butter and Cheese Journal
(1928-32)

National Butter
Journal
(1930-32)

National Cheese
Journal
(1930-32)

Concentrated Milk
Industries
(1930-32)

National Butter and Cheese Journal
(1932-50)

Butter, Cheese and Milk Products Journal
(1950-)

- 2 See Appendix C for more information on the periodicals which began publication between 1930 and 1941.
- 3 Quotation from Butter and Cheese Journal, 21 (Milwaukee, Jan. 1, 1930), 4; for similar expressions see as examples Holstein-Friesian World, 27 (Lacona, Dec. 27, 1930), 3228; Northwest Dairyman and Farmer, 46 (Seattle, Apr., 1931), 4; Pacific Dairy Review, 36 (San Francisco, Jan., 1932), 11; Dairy Produce, 39 (Chicago, June 20, 1932), 12; American Creamery and Poultry Produce Review, 75 (New York, Dec. 21, 1932), 248, presented an unusual example, which in its ideas was quite typical:

"In an attractively illustrated folder Gus Schlosser, president of Schlosser Brothers, Frankfort, Ind., sends out the following optimistic and clever letter to his customers and friends:

'SCHLOSSER BROTHERS

'A New Leaf:

'Feeling sick and sad and rummy, with our hands upon our tummy, was a picture of us all not long ago. But we've brushed away the ashes of our cabbages and crashes, and today we're full of pep and want to go.

'Folks have started in a-buying, and there's little use denying that the tide has turned for all the world to see. And instead of us a-choking, business chimneys will be smoking from the fires of a sane prosperity."

- 4 Quotation from Dairy Produce, 43 (Chicago, Dec. 30, 1936), 6; on the return of prosperity see Holstein-Friesian World, 33 (Lacona, Jan. 11, 1936), 15; Hoard's Dairyman merely advised carrying on:

"You know that in the past no scheme, plan, or program has made alfalfa spring up in your fields. Your own individual attention to the needs of this crop was necessary. So it has been with the feeding and milking of the cows and every other enterprise of the farm. It has been your sweat, your application to the individual problems of your particular job that has helped you most to improve your homes, educate your children, clothe and feed your families.

"Why guess or speculate too much on the future? What you know of the past is a counsel in helping you meet the future."

Hoard's Dairyman, 77 (Ft. Atkinson, Feb. 10, 1932), 76.

- 5 Pacific Dairy Review, 36 (San Francisco, Apr., 1932), 17, 23, 26, 29; Creamery Journal, 50 (Waterloo, Jan., 1939), 22; Dairy Produce, 39 (Chicago, Nov. 7, 1932), 24; *ibid.* (Mar. 7, 1933), p. 20; National Butter and Cheese Journal, 26 (Milwaukee, Dec. 25, 1935), 4; see also Guernsey Breeders' Journal, 42 (Peterboro, Aug. 15, 1932), 156-57; there was also some protest against crop reduction because it did not square with the cause of the depression: "There would be no surplus of dairy products if the purchasing power of the consumers in this country was normal. This is universally conceded, yet there are men who insist that the only way to bring prosperity to the dairy industry is to kill off a lot of cows." National Butter and Cheese Journal, 23 (Feb. 10, 1932), 8.
- 6 First quotation, Dairy Produce, 39 (Chicago, Nov. 7, 1932), 24; second quotation, American Produce Review, 84 (New York, Oct. 27, 1937), 886.
- 7 Dairy Produce, 39 (Chicago, July 6, 1932), 9.
- 8 Dairy Record, 32 (St. Paul, June 10, 1931), 15; Dairy Produce, 39 (Chicago, June 20, 1932), 19; Hoard's Dairyman, 77 (Ft. Atkinson, Mar. 25, 1932), 173.
- 9 Hoard's Dairyman, 81 (Ft. Atkinson, May 25, 1936), 274; Dairy Record, 37 (St. Paul, June 10, 1936), 10.
- 10 Hoard's Dairyman, 75 (Ft. Atkinson, June 25, 1930), 612; Dairy Record, 32 (St. Paul, Sept. 9, 1931), 14; Creamery Journal, 42 (Waterloo, Apr. 15, 1931), 12; for more on the subject see American Creamery and Poultry Produce Review, 75 (New York, Dec. 28, 1932), 288; *ibid.* (Nov. 23, 1932), p. 137; Hoard's Dairyman, 78 (Ft. Atkinson, Mar. 25, 1933), 124; Ice Cream Trade Journal, 29 (New York, Apr., 1933), 44.
- 11 Creamery Journal, 50 (Waterloo, Jan., 1939), 12.
- 12 For some sample reactions to tariffs see Jersey Bulletin and Dairy World, 55 (Indianapolis, Sept. 16, 1936), 1159; Dairy Produce, 43 (Chicago, June 15, 1936), 5; *ibid.* (Feb. 27, 1937), p. 17; American Milk Review, 1 (New York, Sept., 1939), 33.
- 13 Butter and Cheese Journal, 21 (Milwaukee, Feb., 1930), 10-12; Dairy Record, 32 (St. Paul, July 22, 1931), 7; Jersey Bulletin and Dairy World, 51 (Indianapolis, Feb. 10, 1932), 195; Creamery Journal, 42 (Waterloo, Apr. 1, 1931), 6.
- 14 Jersey Bulletin and Dairy World, 51 (Indianapolis, July 20, 1932), 1041.
- 15 Dairy Produce, 39 (Chicago, Feb. 20, 1933), 14.

- 16 Dairy Produce, 39 (Chicago, Mar. 7, 1933), 9; Ice Cream Trade Journal, 29 (New York, July, 1933), 31; Hoard's Dairyman, 78 (Ft. Atkinson, May 25, 1933), 198.
- 17 National Butter and Cheese Journal, 26 (Milwaukee, Jan. 10, 1935), 16.
- 18 Dairy Produce, 43 (Chicago, Aug. 20, 1936), 15.
- 19 Ibid. (Dec. 30, 1936), p. 15; Ice Cream Trade Journal, 34 (New York, Feb., 1938), 6; quotation from ibid., 35 (Jan., 1939), 10.
- 20 Dairy Produce, 48 (Chicago, July, 1941), 15.
- 21 Dairy Record, 32 (St. Paul, Sept. 9, 1931), 9.
- 22 Hoard's Dairyman, 77 (Ft. Atkinson, Sept. 10, 1932), 416; Dairy Record, 32 (St. Paul, Dec. 9, 1931), 9.
- 23 American Creamery and Poultry Produce Review, 57 (New York, Apr. 5, 1933), 798; ibid. (Feb. 15, 1933), p. 520; Dairy Produce, 39 (Chicago, Mar. 7, 1933), 20; Jersey Bulletin and Dairy World, 55 (Indianapolis, Jan. 29, 1936), 127; American Milk Review, 1 (New York, Aug., 1939), 2.
- 24 Butter and Cheese Journal, 21 (Milwaukee, June 25, 1930), 4.
- 25 Dairy Produce, 39 (Chicago, Mar. 7, 1933), 5.
- 26 Dairy Record, 32 (St. Paul, Mar. 30, 1932), 13; ibid., 37 (June 3, 1936), 10; Creamery Journal, 52 (Waterloo, Feb., 1941), 10; American Creamery and Poultry Produce Review, 84 (New York, June 9, 1937), 178; Creamery Journal, 50 (Waterloo, June, 1939), 12; on wages and hours, American Creamery and Poultry Produce Review, vol. 84 (New York, June 9, 1937); American Milk Review, 1 (New York, Aug., 1939), 6.
- 27 Dairy Produce, 48 (Chicago, Feb., 1942), 8.
- 28 See Chapter 13 for details on this program.
- 29 For accounts of drought, and comments thereon see Holstein-Friesian World, 27 (Lacona, Aug. 16, 1930), 1440; ibid. (Sept. 13, 1930), p. 1612; Hoard's Dairyman, 75 (Ft. Atkinson, Sept. 10, 1930), 800; Jersey Bulletin and Dairy World, 51 (Indianapolis, Mar. 2, 1932), 303; Dairy World, 37 (St. Paul, July 15, 1936), 4; Jersey Bulletin and Dairy World, 55 (Indianapolis, Sept. 16, 1936), 4; ibid. (Aug., 19, 1936), p. 1034, carried the following interesting, if not wholly accurate observation: "It is true that the settlers faced grave danger in Indians and stronger wild animals, but none of them ever had to contend with visitations both of drouths, and grasshoppers and hordes of other destructive insects and bugs such as have tens of thousands of farmers in the stricken areas this year, and if a crop fell short they had plentifully stocked woods, plains and streams on which to draw for food." See also Dairy Produce, 43 (Chicago, Aug. 29, 1936), 5. The Holstein-Friesian World, 33 (Lacona, Aug. 22, 1936), 703, noted other noninsect hazards of drought: "With so many dairymen growing Sudan Grass for supplemental pasture use, the warning recently issued by the Department of Agriculture regarding possibilities of dry weather poisoning on such fields is especially timely. The Department points out that in extreme drought, Sudan Grass, canes or any other of the grain sorghums, may develop

amounts of hydrocyanic or prussic acid sufficient to prove fatal to grazing live stock."

- 30 Holstein-Friesian World, 27 (Lacona, Aug. 16, 1930), 1440.
- 31 American Creamery and Poultry Produce Review, 70 (New York, June 11, 1930), 266.
- 32 Butter and Cheese Journal, 21 (Milwaukee, Jan. 1, 1930), 8; Hoard's Dairyman, 78 (Ft. Atkinson, Oct. 25, 1933), 366.
- 33 American Creamery and Poultry Produce Review, 70 (New York, May 28, 1930), 157; Creamery Journal, 43 (Waterloo, May, 1932), 12; *ibid.* (Apr., 1932), p. 12; Dairy Produce, 43 (Chicago, Nov. 16, 1936), 8; American Creamery and Poultry Produce Review, 84 (New York, May 12, 1937), 33; information on Glover from the Holstein-Friesian World, 33 (Lacona, Feb. 8, 1936), 84.
- 34 Pacific Dairy Review, 35 (San Francisco, Feb., 1931), 10; Creamery Journal, 42 (Waterloo, Jan. 1, 1931), 12; Dairy Record, 32 (St. Paul, Dec. 2, 1931), 13; *ibid.*, 37 (Mar. 24, 1937), 10.
- 35 National Butter and Cheese Journal, 26 (Milwaukee, Oct. 10, 1935), 4.
- 36 Creamery Journal, 50 (Waterloo, June, 1939), 6; Dairy Produce, 47 (Chicago, Sept. 16, 1940), 19; *ibid.*, 48 (July, 1941) 15.
- 37 For a variety of unnerved speculation see American Creamery and Poultry Produce Review, 70 (New York, Oct. 22, 1930), 1184; Creamery Journal, 42 (Waterloo, Aug. 1, 1931), 10; Pacific Dairy Review, 35 (San Francisco, Aug., 1931), 9; *ibid.* (Nov., 1932), p. 9; Northwest Dairyman and Farmer, 47 (Seattle, Oct., 1932), 4; American Creamery and Poultry Produce Review, 75 (New York, Nov. 23, 1932), 138; Dairy Produce, 39 (Chicago, Feb. 20, 1933), 16; *ibid.*, 43 (Aug. 29, 1936), 4; Hoard's Dairyman, 81 (Ft. Atkinson, Jan. 10, 1936), 3.
- 38 American Butter Review, 1 (New York, Nov., 1939), 97; Pacific Dairy Review, 44 (San Francisco, Dec., 1940), 20-22; Dairy Produce, 49 (Chicago, May, 1942), 3.
- 39 Hoard's Dairyman, 75 (Ft. Atkinson, Jan. 10, 1930), 19; Pacific Dairy Review, 35 (San Francisco, Jan., 1931), 9; American Creamery and Poultry Produce Review, 75 (New York, Dec. 28, 1932), 293; Ice Cream Trade Journal, 34 (New York, Jan., 1938), 14.
- 40 Butter and Cheese Journal, 21 (Milwaukee, Jan. 1, 1930), 7; Pacific Dairy Review, 36 (San Francisco, Jan., 1932), 11; Guernsey Breeders' Journal, 42 (Peterboro, July 1, 1932), 14; American Creamery and Poultry Produce Review, 75 (New York, Nov. 23, 1932), 123; Dairy Produce, 43 (Chicago, Aug. 29, 1936), 22; Ice Cream Trade Journal, 35 (New York, Dec., 1939), 6.
- 41 Pacific Dairy Review, 43 (San Francisco, June, 1939), 6.
- 42 Butter and Cheese Journal, 21 (Milwaukee, Jan., 1930), 13.
- 43 Ice Cream Trade Journal, 33 (New York, June, 1937), 35; *ibid.*, 29 (Apr., 1933), 45.
- 44 Pacific Dairy Review, 36 (San Francisco, Oct., 1932), 21.

- 45 Hoard's Dairyman, 77 (Ft. Atkinson, May 25, 1932), 277; Dairy Record, 37 (St. Paul, July 15, 1936), 12; Dairy Produce, 49 (Chicago, Mar., 1942), 5.
- 46 American Creamery and Poultry Produce Review, 70 (New York, May 7, 1930), 11; American Creamery and Poultry Produce Review, 75 (New York, Mar. 8, 1933), 664; Dairy Record, 37 (St. Paul, Dec. 30, 1936), 10; Pacific Dairy Review, 36 (San Francisco, June, 1932), 21.
- 47 Hoard's Dairyman, 75 (Ft. Atkinson, June 10, 1930), 564; ibid. (July 10, 1930), p. 653; ibid., 77 (Apr. 25, 1932), 224; ibid. (Mar. 25, 1932), p. 170; Northwest Dairyman and Farmer, 46 (Seattle, Oct., 1931), 12; Jersey Bulletin and Dairy World, 55 (Indianapolis, July 29, 1936), 933; ibid. (Dec. 2, 1936), p. 1554; ibid. (Aug. 19, 1936), p. 1035; ibid. (Sept. 16, 1936), p. 1159; Dairy Produce, 43 (Chicago, Feb. 27, 1937), 27; Hoard's Dairyman, 82 (Ft. Atkinson, Oct. 27, 1937), 564; ibid., 82 (July, 1937), 420.
- 48 Hoard's Dairyman, 82 (Ft. Atkinson, July, 1937), 420.
- 49 Holstein-Friesian World, 27 (Lacona, Oct. 18, 1930), 1843; Holstein-Friesian World, 27 (Dec. 6, 1930), 3066; ibid., p. 3072; ibid., 33 (Aug. 22, 1936), 703; Guernsey Breeders' Journal, 51 (Peterboro, Mar. 15, 1937), 463.
- 50 Ayer's Directory of Newspapers and Periodicals, 1931.
- 51 Holstein-Friesian World, 27 (Lacona, July 5, 1930), 1240-41.
- 52 Holstein-Friesian World, 27 (Lacona, Oct. 11, 1930), 1803; Jersey Bulletin, 59 (Indianapolis, July 17, 1940), 1155.
- 53 Holstein-Friesian World, 27 (Lacona, Nov. 8, 1930), 1992; Jersey Bulletin and Dairy World, 51 (Indianapolis, Feb. 10, 1932), 195; ibid. (Nov. 30, 1932), p. 1729; Hoard's Dairyman, 77 (Ft. Atkinson, Aug. 10, 1932), 376; Dairy Produce, 39 (Chicago, Mar. 7, 1933), 16; Guernsey Breeders' Journal, 51 (Peterboro, Apr. 15, 1937), 658-59; ibid., vol. 42 (1932); Hoard's Dairyman, vol. 85 (Ft. Atkinson, 1940).
- 54 Hoard's Dairyman, 77 (Ft. Atkinson, Feb. 10, 1932), 91.
- 55 Jersey Bulletin, 59 (Indianapolis, Dec. 11, 1940), 1979.
- 56 Creamery Journal, 42 (Waterloo, Oct. 15, 1931), 10; Pacific Dairy Review, 35 (San Francisco, Feb., 1931), 9; Dairy Produce, 39 (Chicago, Mar. 7, 1933), 27; quotations from the Jersey Bulletin and Dairy World, 55 (Indianapolis, Mar. 11, 1936), 295; ibid. (Apr. 15, 1936), p. 439.
- 57 Hoard's Dairyman, 82 (Ft. Atkinson, Jan. 10, 1937), 14.
- 58 Hoard's Dairyman, 85 (Ft. Atkinson, Jan. 25, 1940), 48; on Bang's, Jersey Bulletin and Dairy World, 51 (Indianapolis, June 29, 1932), 935; Hoard's Dairyman, vol. 82 (Ft. Atkinson, Jan. 10, 1937); Guernsey Breeders' Journal, 51 (Peterboro, Jan. 1, 1937), 5; Dairy Produce, 43 (Chicago, May 31, 1937), 16.
- 59 Jersey Bulletin, 59 (Indianapolis, Oct. 9, 1940), 1603.
- 60 Hoard's Dairyman, 85 (Ft. Atkinson, Jan. 10, 1940), 16.
- 61 Butter and Cheese Journal, 21 (Milwaukee, June 25, 1930), 4; ibid. (Jan., 1930), p. 13; Dairy Produce, 39 (Chicago, July 6, 1932), 6; National Butter and Cheese Journal, 26 (Milwaukee, Apr. 25, 1935), 24.

- 62 National Butter and Cheese Journal, 26 (Milwaukee, Jan. 25, 1935), 97; Dairy Record, 37 (St. Paul, June 3, 1936), 11.
- 63 Dairy Record, 37 (St. Paul, June 3, 1936), 11.
- 64 Ice Cream Trade Journal, 34 (New York, July, 1938), 21.
- 65 See, for example, Dairy Produce, 43 (Chicago, June 15, 1936), 9.
- 66 American Milk Review, 1 (New York, Nov., 1939), 7; quotation from the American Produce Review, 69 (New York, Dec. 27, 1939), 226.
- 67 Pacific Dairy Review, 43 (San Francisco, Dec., 1939), 7; quotation from the American Produce Review, 89 (New York, Dec. 27, 1939), 226.
- 68 American Milk Review, 2 (New York, Jan., 1940), 6, 8.
- 69 Pacific Dairy Review, 35 (San Francisco, Aug., 1931), 12; Jersey Bulletin, 51 (Indianapolis, Jan. 6, 1932), 14; American Creamery and Poultry Produce Review, 75 (New York, Mar. 8, 1933), 654; Dairy Produce, 43 (Chicago, Aug. 29, 1936), 16; American Creamery and Poultry Produce Review, 75 (New York, Feb. 15, 1933), 530-31; Ice Cream Trade Journal, 34 (New York, Apr., 1938), 16.
- 70 Jersey Bulletin, 59 (Indianapolis, Dec. 25, 1940), 2051.
- 71 Pacific Dairy Review, 35 (San Francisco, Aug., 1931), 9.
- 72 Jersey Bulletin, 59 (Indianapolis, Aug. 7, 1940), 1262.
- 73 Dairy Record, 32 (St. Paul, Sept. 9, 1931), 26; Dairy Produce, 39 (Chicago, June 20, 1932), 14; other personal and local items, including reports of local fairs, Pacific Dairy Review, vol. 36 (San Francisco, 1932); Jersey Bulletin and Dairy World, 55 (Indianapolis, July 1, 1936), 818; American Creamery and Poultry Produce Review, 75 (New York, Dec. 28, 1932), 293; Northwest Dairyman and Farmer, 45 (Kirkland, Wash., Jan., 1931), 1; Dairy Produce, 39 (Chicago, Nov. 7, 1932), 20; Guernsey Breeders' Journal, 42 (Peterboro, Oct. 15, 1932), 319; National Butter and Cheese Journal, 26 (Milwaukee, Aug. 25, 1935), 5; *ibid.* (Apr. 25, 1935), p. 28.
- 74 Creamery Journal, 42 (Waterloo, Jan. 1, 1931), 8; *ibid.* (Apr., 1931), p. 8; Hoard's Dairyman, 75 (Ft. Atkinson, Jan. 10, 1930), 3; Northwest Dairyman and Farmer, 46 (Kirkland, Apr., 1931), 14; quotation from Hoard's Dairyman, 85 (Ft. Atkinson, June 10, 1940), 336.
- 75 Hoard's Dairyman, 77 (Ft. Atkinson, Feb. 10, 1932), 76.
- 76 Jersey Bulletin and Dairy World, 55 (Indianapolis, Apr. 29, 1936), 503, for example.
- 77 Pacific Dairy Review, vols. 43 and 44 (San Francisco, 1939 and 1940); *ibid.*, 44 (Apr., 1940), 10-11, 24; reader response, *ibid.* (May, 1940), p. 6; *ibid.* (May, 1940), p. 14; *ibid.* (Mar., 1940), p. 6.
- 78 Hoard's Dairyman, 75 (Ft. Atkinson, Jan. 10, 1930), 5.
- 79 Pacific Dairy Review, 35 (San Francisco, Jan., 1931), 10.
- 80 Jersey Bulletin and Dairy World, 55 (Indianapolis, Apr. 29, 1936), 503, for example.
- 81 Hoard's Dairyman, 77 (Ft. Atkinson, Feb. 10, 1932), 69.
- 82 Pacific Dairy Review, 36 (San Francisco, June, 1932), 7; Dairy

Produce, 39 (Chicago, June 20, 1932), 16; Pacific Dairy Review, 43 (San Francisco, Apr., 1939), 11; Jersey Bulletin, 59 (Indianapolis, July 3, 1940), 1039; Creamery Journal, 50 (Waterloo, June, 1939), 18.

Chapter 13

- 1 Creamery Journal, vol. 60 (Waterloo, June 15, 1950); on Dairy Produce, see Chapter 6.
- 2 Ayer's Directory of Newspapers and Periodicals, 1950; Appendix D.
- 3 Ayer's Directory of Newspapers and Periodicals, vols. for 1943 and 1949; For local gossip see the Ice Cream Trade Journal, 46 (New York, Nov., 1950), 30, 45, 46-48, 84, 92; Pacific Dairy Review, 54 (San Francisco, Nov., 1950), 9; "G. I. JOE WRITES ABOUT THE ICE CREAM WITH THE A.E.F.," Ice Cream Trade Journal, 40 (New York, Feb., 1944), 24; "JOINING THE PAST WITH THE PRESENT," Holstein-Friesian World, 41 (Lacona, June 3, 1944), 837; "FRANKLIN DELANO ROOSEVELT," Hoard's Dairyman, 90 (Ft. Atkinson, May 10, 1945), 272; National Butter and Cheese Journal, 38 (Milwaukee, Feb., 1947), 31; "NEED DAIRY HISTORY," Dairy Record, 49 (St. Paul, June 2, 1948), 18; "CAPITAL GAINS," Guernsey Breeders' Journal, 76 (Peterboro, May 1, 1949), 4.
- 4 Pacific Dairy Review, 43 (San Francisco, Feb., 1943), 6; Holstein-Friesian World, 41 (Lacona, June 3, 1944), 836; *ibid.* (Apr. 15, 1944), pp. 21, 72.
- 5 Pacific Dairy Review, 53 (San Francisco, May, 1949), 10.
- 6 Holstein-Friesian World, 47 (Lacona, Oct. 7, 1950), 2067; Jersey Bulletin, 69 (Indianapolis, Nov. 10, 1950), 1745.
- 7 American Butter Review, 3 (New York, Dec., 1941), 415.
- 8 National Butter and Cheese Journal, 33 (Milwaukee, Jan., 1942), 6.
- 9 Jersey Bulletin, 64 (Indianapolis, Feb. 5, 1945), 143. Even if all editorial opinions were not identical, they were remarkably similar:
"SEASON'S GREETINGS.

"The World extends to all its readers best wishes for Christmas and the New Year. The year now drawing to a close has been a year of progress. While few of our people have been spared the toil of sorrow or worry over the fate of loved ones on the war fronts, we may all look over the past year with a feeling of satisfaction over a job well carried on. Our arms are now poised for the knockout punch on enemy soil. On the home front we have accomplished the impossible in food production under the handicaps of short man power and inadequate supplies of equipment. Our breed has enjoyed tremendous demand and steadily growing popularity and its present position should be cause for great gratification to every breeder. We face the future with confidence." Holstein-Friesian World, 41 (Lacona, Dec. 16, 1944), 1892. Under the title "UNITY NEEDED IN 1945," the Creamery Journal complained of cut-throat com-

petition for war profits during the year 1944: "One thing seems fairly certain, however. If the dairy industry can achieve unity and the various branches submerge their own selfish interests for the benefit of the industry as a whole there will be much more chance that 1945 will be a year of success than if some of the branches maintain a narrow policy of considering only their own interest. In view of the approaching end of the war it is more necessary than ever that the industry act as a unit rather than a collection of branches each operating without regard to effect of their actions on other segments of the industry." Creamery Journal, 56 (Waterloo, Jan., 1945), 12.

- 10 The following offer a few examples of editorial inspirational material: Jersey Bulletin, 64 (Indianapolis, Aug. 20, 1945), 1101; National Butter and Cheese Journal, 38 (Milwaukee, June, 1947), 31, 37; Butter, Cheese and Milk Products Journal, 41 (Milwaukee, July, 1950), 42.
- 11 American Butter Review, 3 (New York, July, 1941), 238; Pacific Dairy Review, 48 (San Francisco, Sept., 1943), 8; National Butter and Cheese Journal, 38 (Milwaukee, July, 1947), 36.
- 12 Pacific Dairy Review, 54 (San Francisco, Oct., 1950), 12.
- 13 National Butter and Cheese Journal, 33 (Milwaukee, Dec., 1942), 6; quotation from Dairy Record, 43 (St. Paul, Mar. 10, 1943), 18.
- 14 Pacific Dairy Review, 47 (San Francisco, Jan., 1943), 6; quotation from *ibid.* (May, 1943), p. 18.
- 15 Quotation from Hoard's Dairyman, 90 (Ft. Atkinson, Jan. 10, 1945), 16; on parity see Dairy Record, 49 (St. Paul, Nov. 3, 1948), 20; on ending subsidy see Creamery Journal, 57 (Waterloo, Sept., 1946), 12; Hoard's Dairyman, 90 (Ft. Atkinson, June 10, 1945), 326.
- 16 Creamery Journal, 56 (Waterloo, Nov., 1945), 12; *ibid.*, 61 (Feb., 1950), 14.
- 17 *ibid.*, 57 (July, 1946), 12; *ibid.* (Sept., 1946), p. 12; National Butter and Cheese Journal, 38 (Milwaukee, Jan., 1947), 36.
- 18 Dairy Record, 49 (St. Paul, Apr. 13, 1949), 20-21.
- 19 Pacific Dairy Review, 53 (San Francisco, May, 1949), 10; quotation from the Creamery Journal, 60 (Waterloo, July, 1949), 12; from the quality and contents of the various editorial comments, plus the relative slowness of editorial reaction, it would appear that the actual dislike for the Brannan plan may have been political and partisan.
- 20 Dairy Record, 50 (St. Paul, Aug. 24, 1949), 16.
- 21 *ibid.* (May 3, 1950), p. 16.
- 22 National Butter and Cheese Journal, 41 (Milwaukee, Apr., 1950), 21; Dairy Record, 50 (St. Paul, May 3, 1950), 16; American Butter and Cheese Review, 12 (New York, Jan., 1950), 4; Pacific Dairy Review, 54 (San Francisco, June, 1950), 8.
- 23 Ice Cream Trade Journal, 44 (New York, Feb., 1948), 42; Dairy Record, 50 (St. Paul, Nov. 2, 1949), 20.
- 24 Butter, Cheese and Milk Products Journal, 41 (Milwaukee, June, 1950), 20; Holstein-Friesian World, 47 (Lacona, July 1, 1950), 1395.

- 25 American Butter and Cheese Review, 12 (New York, May, 1950), 2-6; quotation from page 6.
- 26 Dairy Record, 43 (St. Paul, June 3, 1942), 20; *ibid.* (Mar. 10, 1943), p. 19; National Butter and Cheese Journal, 38 (Milwaukee, Apr., 1947), 92; Creamery Journal, 60 (Waterloo, Jan., 1949), 12; Jersey Bulletin, 69 (Indianapolis, Dec. 25, 1950), 2037; American Butter and Cheese Review, 12 (New York, Jan., 1950), 4.
- 27 Pacific Dairy Review, 54 (San Francisco, June, 1950), 8.
- 28 Jersey Bulletin, 69 (Indianapolis, Sept. 10, 1950), 1403.
- 29 Dairy Record, 49 (St. Paul, Oct. 20, 1948), 22.
- 30 American Milk Review, 9 (New York, Dec., 1947), 12; Ice Cream Trade Journal, 46 (New York, Aug., 1950), 24.
- 31 National Butter and Cheese Journal, 33 (Milwaukee, Jan., 1942), 46; Ice Cream Trade Journal, 40 (New York, Feb., 1944), 10.
- 32 Ice Cream Trade Journal, 42 (New York, July, 1946), 24; *ibid.*, 44 (Jan., 1948), 72; *ibid.* (Nov., 1948), p. 26; *ibid.*, 46 (New York, Jan., 1950), 22.
- 33 National Butter and Cheese Journal, 38 (Milwaukee, Dec., 1947), 36.
- 34 Ice Cream Trade Journal, 44 (New York, Jan., 1948), 32.
- 35 Dairy Record, 50 (St. Paul, Aug. 24, 1949), 17.
- 36 *ibid.* (May 3, 1950), 17.
- 37 Butter, Cheese and Milk Products Journal, 41 (Milwaukee, Aug., 1950), 19.
- 38 National Butter and Cheese Journal, 33 (Milwaukee, Jan., 1942), 50; *ibid.*, p. 60; *ibid.* (Apr., 1942), p. 7; *ibid.*, 38 (Dec., 1947), 37.
- 39 Ice Cream Trade Journal, 44 (New York, Aug., 1948), 42; quotation from Creamery Journal, 60 (Waterloo, July, 1949), 12.
- 40 Ice Cream Trade Journal, 46 (New York, Jan., 1950), 32.
- 41 Dairy Record, 50 (St. Paul, May 3, 1950), 17.
- 42 American Butter Review, 3 (New York, Nov., 1941), 379; *ibid.* (Jan., 1941), pp. 1, 31; National Butter and Cheese Journal, 33 (Milwaukee, Apr., 1942), 65; *ibid.* (June, 1942), p. 7; quotation from Dairy Record, 43 (St. Paul, June 10, 1942), 12.
- 43 Dairy Record, 43 (St. Paul, Mar. 31, 1943), 16; Creamery Journal, 56 (Waterloo, June, 1945), 12.
- 44 Dairy Record, 43 (St. Paul, Apr. 28, 1943), 17.
- 45 Pacific Dairy Review, 48 (San Francisco, Jan., 1944), 8; Hoard's Dairyman, 90 (Ft. Atkinson, Jan. 25, 1945), 48; American Milk Review, 9 (New York, June, 1947), 24; National Butter and Cheese Journal, 38 (Milwaukee, June, 1947), 36-37.
- 46 Dairy Record, 49 (St. Paul, June 2, 1948), 18; *ibid.* (July 21, 1948), p. 20; *ibid.* (Nov. 3, 1948), p. 20.
- 47 Dairy Record, 49 (St. Paul, Nov. 10, 1948), 20; Ice Cream Trade Journal, 44 (New York, May, 1948), 32; American Butter and Cheese Review, 10 (New York, Nov., 1948), 4; American Butter Review, 10 (New York, Aug., 1948), 4.
- 48 Hoard's Dairyman, 95 (Ft. Atkinson, Jan. 10, 1950), 9.
- 49 Pacific Dairy Review, 54 (San Francisco, Jan., 1950), 6.

- 50 Creamery Journal, 61 (Waterloo, Feb., 1950), 14; Butter, Cheese and Milk Products Journal, 41 (Milwaukee, July, 1950), 20; American Butter and Cheese Review, 12 (New York, June, 1950), 16; American Butter and Cheese Review, 12 (New York, June, 1950), 3; Pacific Dairy Review, 54 (San Francisco, June, 1950), 41; Butter, Cheese and Milk Products Journal, 41 (Milwaukee, May, 1950), 23.
- 51 Pacific Dairy Review, 54 (San Francisco, Aug., 1950), 6.
- 52 Hoard's Dairyman, 95 (Ft. Atkinson, Sept. 10, 1950), 626.
- 53 National Butter and Cheese Journal, 33 (Milwaukee, Jan., 1942), 7; Pacific Dairy Review, 48 (San Francisco, Nov., 1944), 26; Hoard's Dairyman, 90 (Ft. Atkinson, Nov. 25, 1945), 682; Creamery Journal, 56 (Waterloo, July, 1945), 8; National Butter and Cheese Journal, 38 (Milwaukee, Aug., 1947), 42; Creamery Journal, 57 (Waterloo, Apr., 1946), 12; American Butter Review, 10 (New York, Jan., 1948), 4.
- 54 Creamery Journal, 56 (Waterloo, July, 1945), 12; American Milk Review, 9 (New York, Feb., 1947), 3; American Butter and Cheese Review, 12 (New York, May, 1950), 8.
- 55 Holstein-Friesian World, 41 (Lacona, Feb. 19, 1944), 244; Hoard's Dairyman, 90 (Ft. Atkinson, May 10, 1945), 272.
- 56 Quotation from Dairy Record, 50 (St. Paul, Nov. 2, 1949), 21; other examples, "DAIRY FARMING IN THE SOUTH," Holstein-Friesian World, 41 (Lacona, June 3, 1944), 889; "A GREAT DAIRY STATE NOT YET MEETING NEEDS," ibid. (Nov. 4, 1944), p. 1629; "CALIFORNIA'S AGRICULTURE UNBALANCED," Pacific Dairy Review, 53 (San Francisco, Nov., 1949), 18.
- 57 Dairy Record, 50 (St. Paul, Nov. 2, 1949), 21.
- 58 Various kinds of farm information: "EYESIGHT AND PASTURE," Hoard's Dairyman, 90 (Ft. Atkinson, Oct. 10, 1945), 547; ibid. (June 10, 1945), p. 320; ibid., 95 (Feb. 25, 1950), 130; "BEGIN LAMB CARE NOW," "PIG'S TURNED-UP NOSE IS DANGER SIGNAL," ibid. (Feb. 25, 1950), p. 147; "PAINT MATERIALS ARE HAZARDOUS," "PRECAUTIONS AGAINST SLEEPING SICKNESS," ibid. (June 25, 1950), p. 452. Quotations from Hoard's Dairyman, 90 (Ft. Atkinson, Sept. 25, 1945), 512. Other examples of articles on handling bulls, Jersey Bulletin, 69 (Indianapolis, Nov. 25, 1950), 1853; Hoard's Dairyman, 95 (Ft. Atkinson, Jan. 25, 1950), 67.
- 59 Holstein-Friesian World, 47 (Lacona, July 15, 1950), 1478.
- 60 Hoard's Dairyman, 90 (Ft. Atkinson, Apr. 25, 1945), 240; ibid. (June 10, 1945), p. 326; ibid. (Sept. 25, 1945), p. 513; Guernsey Breeders' Journal, 76 (Peterboro, May 1, 1949), 5; Jersey Bulletin, 69 (Indianapolis, Oct. 10, 1950), 1617; quotation from the National Butter and Cheese Journal, 33 (Milwaukee, Apr., 1942), 7.
- 61 Holstein-Friesian World, 41 (Lacona, Dec. 2, 1944), 1800.
- 62 On youth, Jersey Bulletin, vol. 64 (Indianapolis, 1945), although the page may have begun in the previous volume; Guernsey Breeders' Journal, 76 (Peterboro, Aug. 1, 1949), 1028; accounts

of sales, etc., "A GREAT YEAR AHEAD," Holstein-Friesian World, 41 (Lacona, Jan. 1, 1944), 20; "MICHIGAN STATE SALE AVERAGES \$402," Holstein-Friesian World, 41 (Lacona, Nov. 18, 1944), 1722; "FRANLO SALE MAKES HISTORY WITH \$1,088 AVG.," ibid., 47 (Aug. 5, 1950), 1557; "THE ELLIFF HERD," Jersey Bulletin, 69 (Indianapolis, July 10, 1950), 1033; quotation from, ibid., 69 (Sept. 10, 1950), 1393. The editor boasted: "Note in this issue that we have reports on Jersey success—more than that, of Jersey pre-eminence—in Alaska and Puerto Rico, two extremes of America. We have also had reports about Jersey success in Denmark, South Africa and New Zealand besides such prosaic places as Texas, Oregon, Carolina and New Hampshire. Also, we now have spies at work in South America and Australia ferretting out the facts about Jerseys there. We hope to present them to you soon, and they will make good reading."

- 63 Jersey Bulletin, 64 (Indianapolis, Jan. 5, 1945), 14.
- 64 Ibid. (Oct. 20, 1945), p. 1461; quotation from Holstein-Friesian World, 47 (Lacona, Oct. 7, 1950), 2080.
- 65 Holstein-Friesian World, 47 (Lacona, Oct. 7, 1950), 2080; Hoard's Dairyman, 95 (Ft. Atkinson, Jan. 10, 1950), 18.
- 66 American Butter Review, 3 (New York, Nov., 1941), 379; Pacific Dairy Review, 48 (San Francisco, Mar., 1944), 19; American Butter Review, 3 (New York, July, 1941), 248, 239; Ice Cream Trade Journal, 40 (New York, June, 1944), 6; quotation from American Butter Review, 10 (New York, Apr., 1948), 4.
- 67 Creamery Journal, 57 (Waterloo, Nov., 1946), 12.
- 68 American Butter Review, 3 (New York, Jan., 1941), 2; National Butter and Cheese Journal, 38 (Milwaukee, July, 1947), 54.
- 69 Dairy Record, 49 (St. Paul, Oct. 20, 1948), 23; National Butter and Cheese Journal, 41 (Milwaukee, Jan., 1950), 21.
- 70 National Butter and Cheese Journal, 41 (Milwaukee, Jan., 1950), 21.
- 71 Dairy Record, 43 (St. Paul, June 3, 1942), 17.
- 72 National Butter and Cheese Journal, 33 (Milwaukee, July, 1942), 6; see also ibid. (Dec., 1942), p. 6; Dairy Record, 43 (St. Paul, June 3, 1942), 16.
- 73 Dairy Record, 43 (St. Paul, June 3, 1942), 26.
- 74 Creamery Journal, 56 (Waterloo, Mar., 1945), 12; Holstein-Friesian World, 41 (Lacona, Feb. 10, 1944), 225; Dairy Record, 43 (St. Paul, June 17, 1942), 12; the processing branch of the industry was also interested in keeping its workers. As the National Butter and Cheese Journal explained in 1942: "If you have possible draftees in your business organization who are particularly valuable, so valuable in fact that you don't see how you can spare them, we suggest you lay the facts before the local draft board. Don't leave the job to anybody else. Go yourself and show just how the employee can render his country better service by remaining on his job. The government is expecting great results from the dairy industry, and it must not be handicapped by losing its good employees, but the members

of the draft board should not be expected to see the picture as you see it." National Butter and Cheese Journal, 44 (Milwaukee, Jan., 1942) 6.

- 75 Creamery Journal, 56 (Waterloo, Mar., 1945), 12.
- 76 National Butter and Cheese Journal, 33 (Milwaukee, Apr., 1942), 6; Dairy Produce, 49 (Chicago, May, 1942), 6; Dairy Record, 43 (St. Paul, June 10, 1942), 14; ibid. (June 17, 1942), p. 10; on organized labor see the Pacific Dairy Review, 48 (San Francisco, Mar., 1943), 33; ibid., 53 (May, 1949), 29-30; Dairy Produce, 49 (Chicago, May, 1942), 8; Creamery Journal, 56 (Waterloo, Oct., 1945), 12; ibid., 56 (Nov., 1945), 12; Jersey Bulletin, 64 (Indianapolis, Oct. 20, 1945), 1461; Creamery Journal, 57 (Waterloo, July, 1946), 12.
- 77 American Milk Review, 9 (New York, Apr., 1947), 8.
- 78 Ice Cream Trade Journal, 44 (New York, Oct., 1948), 72.
- 79 Dairy Record, 49 (St. Paul, June 2, 1948), 19; ibid. (Nov. 3, 1948), p. 20; Hoard's Dairyman, 95 (Ft. Atkinson, Jan. 10, 1950), 9.
- 80 Hoard's Dairyman, 90 (Ft. Atkinson, Sept. 25, 1945), 512.
- 81 ibid. (Jan. 25, 1945), p. 62; Pacific Dairy Review, 53 (San Francisco, May, 1949), 35; Jersey Bulletin, 69 (Indianapolis, July 10, 1950), 1029.
- 82 Jersey Bulletin, 64 (Indianapolis, Mar. 5, 1945), 279; Butter, Cheese and Milk Products Journal, 41 (Milwaukee, July, 1950), 32-34.
- 83 Holstein-Friesian World, 41 (Lacona, Oct. 7, 1944), 1361; Jersey Bulletin, 64 (Indianapolis, Jan. 20, 1945), 82; Guernsey Breeders' Journal, 75 (Peterboro, May 15, 1949), 228; Jersey Bulletin, 64 (Indianapolis, Mar. 5, 1945), 279; ibid., 69 (Sept. 10, 1950), 1410.
- 84 Pacific Dairy Review, 54 (San Francisco, Aug., 1950), 6.
- 85 Ice Cream Trade Journal, 46 (New York, July, 1950), 28.
- 86 American Butter and Cheese Review, 12 (New York, July, 1950), 8; on the same subject the Jersey Bulletin took its typically different attitude. About the only notice of the Korean war was a brief mention stuck in the bottom of a news report, which follows:

"July, 1950, will go down in Jersey history as an historic month. For it was in that month that the contract for the new club building was let and actual construction was begun at the site. It is not possible to realize how much time has actually gone into the planning of this event by members of the American Jersey Cattle Club's staff and by the Board of Directors, and especially by the Building Committee and their advisors. Their efforts are beginning to bear fruit.

"Those persons will watch the progress of the builders with an especial interest.

"The wisdom of the decision to build at this time is more than ever apparent now, with the war situation what it is. The builders do not anticipate that any wartime shortages will hinder the completion of this project. A few months delay might

have made it most difficult." From the Jersey Bulletin, 69 (Indianapolis, Aug. 10, 1950) 1217.

- 87 Holstein-Friesian World, 47 (Lacona, Aug. 5, 1950), 1568; Butter, Cheese and Milk Products Journal, 41 (Milwaukee, Aug., 1950), 18; quotation from Hoard's Dairyman, 95 (Ft. Atkinson, Sept. 10, 1950), 626.

Chapter 14

- 1 Jersey Bulletin and Dairy World, 55 (Indianapolis, July, 1936), 818; letter from R. H. Brown to A. W. Hopkins, dated Apr. 15, 1952.
- 2 Ibid.
- 3 Stuntz, List; Jersey Bulletin, vol. 61 (Indianapolis, July 5, 1942); ibid., 30 (Dec. 27, 1911), 2113; ibid., vol. 38 (Mar. 19, 1919).
- 4 Jersey Bulletin, 31 (Apr. 3, 1912), 511.
- 5 See the Jersey Bulletin, 4 (Feb. 24, 1886), 347-48; ibid., 30 (Dec. 27, 1911), 2113.
- 6 Ibid., 4 (June 15, 1887), 390.
- 7 See Ayer's Newspaper Annual, 1882-1909; Ayer's American Newspaper Annual and Directory, 1910-1929; Ayer's Directory of Newspapers and Periodicals, 1930-1950; Rowell's American Newspaper Directory, 1883-1888; each for the appropriate years.
- 8 Jersey Bulletin, 18 (Indianapolis, Jan. 11, 1899), 30.
- 9 Ibid., 11 (June 22, 1892), 405.
- 10 Ibid., 18 (June 7, 1899), 471.
- 11 Ibid., (Jan. 11, 1899), p. 30.
- 12 Ibid., 30 (Aug. 23, 1911), 1348.
- 13 It is strange that the postmaster waited so long. See the issue of February 1, 1899 for an example of excessive textual advertising. And this was the off season for cattle sales. Jersey Bulletin, 18 (Indianapolis, Feb. 1, 1899).
- 14 The title "and Dairy World," had been dropped by 1939. See the Jersey Bulletin, vol. 58 (Indianapolis, 1939); in the order of the appearance of the articles mentioned: Jersey Bulletin and Dairy World, 36 (Jan. 3, 1917), 21; ibid., 38 (Dec. 3, 1919), 2454; ibid., 48 (Jan. 2, 1929), 17; the quotation is from ibid., 59 (July 3, 1940), 1035.
- 15 A regular column on "Creamline News," was carried at least as early as 1940. See the Jersey Bulletin, vol. 59 (Indianapolis, 1940); quotation from the Jersey Bulletin and Dairy World, 36 (Indianapolis, July 4, 1917), 1034.
- 16 Jersey Bulletin and Dairy World, 51 (Indianapolis, Sept. 28, 1932), 1416.
- 17 "An Autobiographical Letter," letter from W. D. Hoard to Charles A. Stringer, sometime in 1916, published in the Madison County (N.Y.) Leader and later in the Jefferson County Union. See also, Chapters 4 and 5.
- 18 Ben Walker, "Brief Review of the History and Important Work and Influence of Hoard's Dairyman," Unpublished manuscript, prepared in 1931; copy on file at Hoard's Dairyman office in Ft. Atkinson.

- 19 Hoard's Dairyman, 95 (Ft. Atkinson, June 25, 1950), 54; Dairy Messenger, 1 (Chicago, Jan., 1892), 15; the circulation figures given below were supplied by W. D. Knox, editor of Hoard's Dairyman:

1885	700	1907	30,000	1929	156,970
1886	1,500	1908	35,000	1930	186,070
1887	2,500	1909	40,000	1931	183,070
1888	3,000	1910	45,000	1932	184,699
1889	6,000	1911	60,000	1933	181,301
1890	7,500	1912	66,000	1934	182,915
1891	9,000	1913	66,400	1935	183,316
1892	11,000	1914	66,500	1936	188,800
1893	14,500	1915	67,866	1937	194,488
1894	15,000	1916	68,740	1938	209,061
1895	16,000	1917	71,226	1939	226,444
1896	17,000	1918	67,304	1940	227,716
1897	18,500	1919	77,808	1941	233,109
1898	18,800	1920	84,086	1942	242,866
1899	19,000	1921	83,625	1943	241,264
1900	19,400	1922	83,027	1944	236,514
1901	19,800	1923	90,513	1945	242,709
1902	21,000	1924	109,387	1946	257,389
1903	21,500	1925	109,769	1947	278,174
1904	22,000	1926	113,365	1948	300,905
1905	24,000	1927	128,537	1949	311,865
1906	28,000	1928	145,543	1950	332,459

- 20 Hoard's Dairyman, vol. 62 (Ft. Atkinson, 1921); ibid., 71 (Feb. 26, 1926), 230; ibid., 75 (Jan. 10, 1930), 33; the 1950 list of the editorial staff is also interesting: "Associate Editor, E. C. Meyer. Veterinary Editor, Dr. J. W. Bailey; Advertising Manager, A. S. Booker; Livestock Advertising, J. G. Poynton; Dairy Farm Home Editor, Mamie Dietz; Asst. Adv. Mgr., M. J. Kerschensteiner; Subscription Mgr., J. W. Roberts." Hoard's Dairyman, 95 (Ft. Atkinson, Jan. 10, 1950), 4.
- 21 Hoard's Dairyman, 75 (Ft. Atkinson, Jan. 10, 1930), 33.
- 22 Ibid., 23 (July 22, 1892), 2376.
- 23 See for examples: ibid., vol. 31 (1900); ibid., vol. 38 (1907); ibid., vol. 49 (1915); ibid., vol. 75 (1930).
- 24 Ibid., 23 (June 10, 1892), 2282.
- 25 Ibid., 31 (Jan. 18, 1901), 975.
- 26 Ibid., 29 (Apr. 1, 1898), 138.
- 27 For example see ibid., 38 (May 3, 1907), 370.
- 28 Ibid., vol. 62 (1921).
- 29 This column began on May 10, 1937; see ibid., vol. 82 (May 10, 1937).
- 30 Holstein-Friesian Register, 46 (Brattleboro, Jan. 1, 1928), 6; see also Stuntz, List.
- 31 Stuntz, List; Holstein-Friesian Register, 10 (Brattleboro, Mar. 1, 1896), 135; ibid., 11 (May 1, 1896), 3; ibid., vol. 28 (1910). The advantages for an editor of being an official of a breeder organization are obvious.

- 32 Holstein-Friesian Register, 10 (Brattleboro, Mar. 1, 1896), 135; ibid., vol. 12 (1897).
- 33 ibid., 35 (July 1, 1917), 1229.
- 34 ibid., 35 (Mar. 15, 1917), 571; ibid. (June 15, 1917), p. 1154.
- 35 ibid., 46 (Apr. 1, 1928), 110.
- 36 ibid., vol. 28 (1910); quotation from ibid. (June 15, 1910), p. 724.
- 37 See the Holstein-Friesian Register, vols. 29-35 (1911 to 1917).
- 38 ibid., 35 (Jan. 1, 1917), 261.
- 39 ibid., 41 (Mar. 1, 1923), 239; ibid., vol. 44 (Aug. 1, 1926).
- 40 Kimball's Dairy Farmer, 1 (Waterloo, Jan. 15, 1903), 1; see also Seaman, "Early Iowa Farm Journals," pp. 11-12; also Chapter 8, this work.
- 41 Stuntz, List; Seaman, "Early Iowa Farm Journals," pp. 11-12; Nebraska Dairyman, 8 (Lincoln, Aug., 1904), 2 of supplement; Dairy Farmer, 20 (Des Moines, Oct. 1, 1922), 8.
- 42 Stuntz, List; Dairy Farmer, 25 (Des Moines, Mar., 1927), 18; ibid., 20 (Oct. 1, 1922), 3; ibid., vol. 25 (June, 1927); ibid., 27 (Sept., 1929), 11; the reason for the demise is based on a conversation between E. M. Harmon and John Schlebecker in 1953.
- 43 Kimball's Dairy Farmer, vol. 1 (Waterloo, Jan. 15, 1903); ibid., 14 (Jan. 15, 1916), 10; Dairy Farmer, 20 (Des Moines, Oct. 1, 1922), 3. Circulation increases were impressive. In 1907 the journal claimed 21,666 subscribers, in 1912 this had increased to 60,483, and by 1919 reached 155,294. In 1922 circulation dropped to 63,937, but by 1928 had reached 251,307, the highest figure attained by any dairy paper at that time. Data from Ayers for years given.
- 44 See Chapters 7 and 8 for more on Kimball—see footnotes especially; quotation from: Kimball's Dairy Farmer, 4 (Waterloo, Apr. 15, 1906), 2.
- 45 On electricity see the Dairy Farmer, 25 (Des Moines, Oct., 1927), 6, 18, 30. Three separate articles in this one issue.
- 46 Letter from M. S. Prescott to A. W. Hopkins, dated Oct. 25, 1951; Holstein-Friesian World, 11 (Madison, Nov. 14, 1914), 1620; ibid., 17 (Lacona, Oct. 9, 1920); for examples of more poor typography see ibid., vol. 22 (1925).
- 47 Holstein-Friesian World, 4 (Ithaca, Mar. 22, 1907), 120; as a comparison with this quotation, a typical article from the Holstein-Friesian World of July, 1925, may be interesting: "26. Champion Dora Korndyke.
"It was in March, 1919 that Wisconsin got her first Holstein Dairy Queen. She was Champion Dora Korndyke, bred by Stevens Bros.—Hastings Co., Liverpool, N.Y., but developed by Pabst Holstein Farms, Oconomowoc, Wis. Her record was 1,315.94 lbs. butter from 29,395.7 lbs. milk with an average test of 3.58 per cent for the year. This butter record still stands as the highest in the Badger State. She had several years previously made 1,000 lbs. record, then at eight years old made the record given above. The following year she came back at nine years old with 1,249.06 lbs. butter from 28,602.9 lbs. milk. At first it was thought that she had made a second

record above 1,000 lbs. fat, something that had not at that time been done by any cow of the breed. Although the final figures of her second or rather third record were just a few ounces under 1,000 lbs. fat, she was at that time, the only cow of the breed with two records above 1,200 lbs. butter and champion of the breed for total of two years' production, consecutive or otherwise, as well as having twice produced more butter and more milk than any other Wisconsin cow at that time. She also had a 34 lb. seven-day record and several other good short-time records." Holstein-Friesian World, 22 (Lacona, July 4, 1925) 1218.

- 48 Holstein-Friesian World, 4 (Ithaca, Jan. 8, 1907), 9.
- 49 Creamery Journal, vol. 2 (Waterloo, Feb., 1891); ibid., 3 (Dec., 1892), 16; ibid., 4 (Jan., 1894), 22 and passim.; Dairy Messenger, 1 (Chicago, Jan., 1892), 15; passim, List.
- 50 Creamery Journal, 6 (Waterloo, Sept., 1896), 14.
- 51 Ibid., 20 (Feb., 1909); ibid. (June 15, 1909), p. 15; ibid., 26 (Oct. 1, 1915), 14; ibid. (May 1, 1916), p. 14; ibid. (May 15, 1916), p. 1; ibid., vol. 50 (Jan., 1939); letter from E. S. Estel to the Librarian, University Experiment Station, Madison, Wisconsin, dated June 15, 1950 and bound with volume 60 of the Creamery Journal; Ayer's annuals for years given.
- 52 Creamery Journal, 2 (Waterloo, Feb. 1, 1891), 1, 2-3, 6, 10-11; ibid. (Apr. 1, 1891), p. 1; ibid. (Sept. 1, 1891), p. 1; ibid., 3 (Mar. 1, 1892), 4-5; ibid. (July 1, 1892), p. 7; ibid., 4 (June 1, 1893), 12; ibid., 6 (May 1, 1896), 14; ibid. (Jan. 1, 1896), p. 14; quotation from ibid., 6 (Sept. 1, 1896), 16.
- 53 Ibid., 20 (Feb. 1, 1909), 14; ibid., 9 (Oct., 1898), 10.
- 54 Ibid., 17 (Feb. 1, 1906), 15; ibid., 21 (Feb. 1, 1910), 14; ibid., 27 (May 1, 1916), 14.
- 55 Creamery Journal, 20 (Waterloo, June 15, 1909), 20; ibid. (July 15, 1909); ibid., vol. 37 (Sept. 15, 1926); ibid., 36 (Feb. 1, 1925), 14; ibid., vol. 43 (May, 1932); ibid., vol. 51 (May, 1940); ibid., vol. 60 (May, 1949).
- 56 Dairy Record, 25 (St. Paul, June 18, 1924), 14, 44-45; Creamery Journal, 27 (May 15, 1916), 1; Dairy Record, 23 (July 26, 1922), 4-5; ibid., 23 (Aug. 9, 1922), 4.
- 57 Ayer's annuals for the appropriate years. U.S. Census, 1940: Manufactures, 1939, I Statistics by Subjects, (Washington, D.C., 1942), 22-32.
- 58 On advertisements, Dairy Record, vol. 8 (St. Paul, Apr. 15, 1908); on operation of co-ops and on centralizers, see especially ibid. (Mar. 4, 1908), p. 8; ibid., 13 (June 26, 1912), 5; ibid., 18 (June 7, 1916), 9; ibid. (July 12, 1916), p. 6.
- 59 Ibid., 14 (Nov. 6, 1912), 8.
- 60 Ibid., 50 (May 3, 1950), 17.
- 61 Dairy Record, 50 (May 31, 1950), 16; the editor was in error when he asserted that the journal had never changed name since 1900.
- 62 Letter from Thomas D. Cutler to John T. Schlebecker, dated Apr. 28, 1953.

- 63 Ice Cream Trade Journal, vol. 8 (New York, Jan., 1912); ibid. (May, 1912), p. 41; ibid., 20 (Jan., 1924), 74; letter from Cutler to Schlebecker dated Apr. 28, 1953; Ice Cream Trade Journal, 33 (New York, July, 1937), 5.
- 64 On changes of editors see the Ice Cream Trade Journal, 25 (New York, Nov., 1929), 90; ibid., 33 (Oct., 1937), 4; ibid., 34 (June, 1938), 4; ibid., vol. 35 (Jan., 1939); ibid. (Sept., 1939), p. 4; ibid. (Oct., 1939), p. 6; ibid. (Nov., 1939), p. 4.
- 65 Letter from Vincent M. Rabuffo to John T. Schlebecker, dated Feb. 23, 1953.
- 66 Ice Cream Trade Journal, vol. 8 (New York, Mar., 1912); quote from ibid., 13 (Aug., 1917, 38; ibid., 9 (Nov., 1913), 50.
- 67 Statistics on circulation from Ayer's; Ice Cream Trade Journal, vol. 17 (New York, Feb., 1921); ibid., vol. 29 (Sept., 1933).
- 68 ibid., 29 (Jan., 1933), 14; ibid., 34 (June, 1938), 6; ibid., 40 (Feb., 1944), 30; ibid. (Jan., 1944). On frozen foods, see previous chapters.
- 69 Of the editors mentioned in this chapter, several had other journalistic experience before entering the field of dairy journalism. In particular one might mention W. D. Hoard, W. A. Gordon, T. D. Cutler, V. M. Rabuffo, E. K. Slater, and probably F. H. Kimball. C. G. Brown seems to have had training of a literary sort, and Houghton was a lawyer. Of the very early editors, only D. H. Jenkins entered into dairy journalism without previous experience along those lines.
- 70 Butter, Cheese and Egg Journal, 1 (Milwaukee, Jan. 26, 1910), 3; National Butter and Cheese Journal, 26 (Jan. 25, 1935), 7; letter from Lester Olsen to Andrew W. Hopkins, dated June 23, 1954.
- 71 Butter, Cheese and Egg Journal, 1 (Milwaukee, Feb. 9, 1910), 3; ibid. (Jan. 26, 1910), 3, in which the publisher remarked: "We wish to extend our sincere thanks to the large number of boys throughout Wisconsin, who, in response to the circular letter sent out by the Secretary of the State Buttermakers' Association, have subscribed...." For statistics, see Ayer's for the appropriate years.
- 72 Butter and Cheese Journal, vol. 19 (Milwaukee, Apr. 14, 1928); ibid., vol. 21 (Jan., 1930); National Butter and Cheese Journal, 23 (Feb. 10, 1932), 8; ibid., vol. 33 (Jan., 1942); Butter, Cheese and Milk Products Journal, vol. 41 (May, 1950).
- 73 The following quotation summarizes changes in editorial personnel fairly well: "The first editor was D. A. Burch, a trained dairy expert, who continued as editor until March, 1911, when Prof. John Michels, a well known dairy leader in Wisconsin, took over his duties. Mr. Michels was succeeded by R. G. Jones, who had spent several years in state dairy work, in March, 1912. B. D. White, a practical creamery operator and for several years a state creamery inspector in Minnesota, took over the editorial duties in October, 1913, and continued until May, 1918, when J. G. Moore, old time Wisconsin creamery inspector, became editor. He was succeeded in November,

1920, by another old time buttermaker, E. K. Slater, who is still on the job." National Butter and Cheese Journal, 26 (Jan. 25, 1935), 8.

- 74 Butter, Cheese and Egg Journal, 11 (Milwaukee, Dec. 8, 1920), 2; letter from E. K. Slater to Andrew W. Hopkins, no date, but around September, 1953; see also the biography of Slater given in the National Butter and Cheese Journal, 26 (Jan. 25, 1935), 12.
- 75 Butter, Cheese and Egg Journal, 1 (Milwaukee, May 3, 1910), 4, 16; *ibid.*, 11 (Feb. 25, 1920), 4-5; *ibid.*, 1 (May 3, 1910), 9; *ibid.*, 11 (Feb. 25, 1920), 18, 40.
- 76 See tables of contents for issues of these years; for emphasis on advertising see particularly, National Butter and Cheese Journal, 26 (Jan. 25, 1935), 32.
- 77 For the formation of the various papers in the Olsen group see Ayer's for the appropriate years; also, National Butter and Cheese Journal, 26 (Jan. 25, 1935), 7.

Bibliography

In September, 1951, the authors sent letters to various editors of then current periodicals asking for certain specific items of information regarding the history of their journals. We received twenty-six replies, most of which contained the information requested. In 1953 we sent out a questionnaire to the same list of forty-seven editors, requesting additional information. We also sent questionnaires to defunct periodicals hoping that the post office would forward the mail to some person who would be able to supply the information requested. In those instances where the questionnaires were returned unanswered, Professor Hopkins sent the questionnaire to some college or extension editor in the region where the dead periodical had existed. As a result, we received thirty-five replies to the second request for information. For the papers which appeared after 1910, most of this information has been put in the several appendices to the study. All of the manuscript materials cited in this work are in the possession of the Wisconsin State Historical Society at Madison, unless some other specific location is given in a footnote.

In addition to information acquired through letters or questionnaires, we obtained some interesting and valuable insights into the history of dairy journalism through conversations with W. D. Knox, editor of Hoard's Dairyman; E. M. Harmon, former editor of the Dairy Farmer; and Paul Burchard, former assistant editor of Hoard's Dairyman. Their observations on the various journals and on the history of dairy journalism were frequently very helpful. In most cases, however, they spoke "off the record," and consequently are not quoted or cited in this survey. They did suggest many ideas which it was possible to check in other sources, and we are indebted to them for several "leads."

It was impractical in a work covering so great a period to examine the manuscript collections available in the offices of the several periodicals or in various distant archives. Since this study was only concerned with the editors as such, the journals quite adequately provided most of the information. Obituaries contained enough personal material on any particular editor, and interpublication comments revealed the editorial attitudes of otherwise obscure publications.

Dairy and General Agricultural Journals

Agricultural Museum. Georgetown, D.C., 1810-12.

American Agriculturist. New York, 1842-51.

American Butter Review. See American Creamery.

American Cheesemaker. Grand Rapids, Mich., 1886-1917.

American Creamery. Holly, Mich., 1888-92; Chicago, 1892-96.

Continued as

New York Produce Review and American Creamery. New York, 1897-1929.

Continued as

American Creamery and Poultry Produce Review. New York, 1930-37.

Continued as

American Produce Review. New York, 1937-39.

Continued as

American Milk Review. New York, 1939-.

and

American Butter Review. New York, 1939-.

American Creamery and Poultry Produce Review. See American Creamery.

American Dairyman. New York, 1883-1912.

American Farmer. Baltimore, 1819-34.

American Farmer. See Practical Dairyman; Western Farmer and Dairyman.

American Milk Review. See American Creamery.

American Produce Review. See American Creamery.

Blooded Stock. Oxford, Pa., etc., 1895-1913.

Brownell's Dairy Farmer. See Michigan Dairy Farmer.

Butter and Cheese Journal. See Butter, Cheese and Egg Journal.

Butter, Cheese and Egg Journal. Milwaukee, 1910-28.

Continued as

Butter and Cheese Journal. Milwaukee, 1928-30.

Continued as

National Butter Journal. Milwaukee, 1930-32.

and

National Cheese Journal. Milwaukee, 1930-32.

and

Concentrated Milk Industries. Milwaukee, 1930-32.

Continued as

National Butter and Cheese Journal. Milwaukee, 1932-50.

Continued as

Butter, Cheese and Milk Products Journal. Milwaukee, 1950-.

Butter, Cheese and Milk Products Journal. See Butter, Cheese and Egg Journal.

Cheese and Dairy Journal. Whitewater, Wis., 1904-5.

Continued as

Cheese and Dairy Journal and Creamery Reporter. Whitewater, Wis., 1905-6.

Cheese and Dairy Journal and Creamery Reporter. See Cheese and Dairy Journal.

Cheese Reporter. See Sheboygan County News.

Chicago Dairy Produce. See Chicago Markets.

Chicago Markets. Chicago, 1894.

Continued as

Chicago Produce. Chicago, 1894-98.

Continued as

Chicago Dairy Produce. Chicago, 1898-1927.

Continued as

Dairy Produce. Chicago, 1927-42.

Chicago Produce. See Chicago Markets.

Colorado Dairyman. Denver, 1909-15.

Concentrated Milk Industries. See Butter, Cheese and Egg Journal.

Country Gentleman. New York, 1853-65. (Title later revived.)

Creamery Gazette. Des Moines, 1895-98.

Creamery Journal. Waterloo, Iowa, 1890-1950.

Cultivator. Albany, 1834-97.

Dairy Age. Beloit, Kan., 1900-3.

Dairy and Creamery. Chicago, 1899-1904.

Dairy and Produce Review. San Francisco, 1901-6.

Continued as

Pacific Dairy Review. San Francisco, 1906-.

Dairy Bulletin. Macedonia, Ohio, 1909-10.

Dairy Farmer. See Kimball's Dairy Farmer; Dairyman's Record.

Dairy Gazette. See Nebraska Dairyman and Up-to-Date Farmer.

Dairy Market Reporter. See Sheboygan County News.

Dairy Messenger. Chicago, 1890-94.

Dairy Produce. See Chicago Markets.

Dairy Record. St. Paul, 1903-.

Dairy Reporter. See St. Paul Dairy Reporter.

Dairy World. Chicago, 1881-1906.

Dairyman's Record. Little Falls, N.Y., 1859-60.

Continued as

Dairy Farmer. Little Falls, N.Y., 1860-62.

Elgin Dairy Report. Elgin, Ill., 1891-1922.

Farmer and Dairyman. Utica, Syracuse, 1880-86.

Genesee Farmer. Rochester, 1845-65.

Guernsey Breeders' Sale List and Bulletin. Peterboro, N.H., 1906-9.

Guernsey Breeders' Journal. Westchester, Pa., 1885-86.

Guernsey Breeders' Journal. Peterboro, N.H., 1910-.

Heatwole's Dairy Paper. Northfield, Minn., 1906-8.

Continued as

Minnesota Dairyman. Northfield, Minn., 1908-14.

Continued as

Northwest Dairyman. Northfield, Minn., 1914-18.

Hoard's Dairyman. Ft. Atkinson, Wis., 1885-.

Holstein-Friesian Register. Brattleboro, Vt., Boston, 1886-1928.

Holstein-Friesian World. Ithaca, N.Y., Lacona, N.Y.; Madison, Wis., 1904-.

Ice Cream Trade Journal. New York, 1905-.

Jefferson County Union. Lake Mills and Ft. Atkinson, Wis., 1870-.

Jensen's Dairyman. Beloit, Kan., 1898-1900.

- Jersey Advocate and Dairyman. New York, 1901-2.
Jersey Bulletin. Indianapolis, 1883-
Kansas Dairy Farmer. Enterprise, 1899-1901.
Kansas Dairyman. Eureka, 1898-99.
Kimball's Dairy Farmer. Waterloo, Iowa, 1903-19.
Continued as
Dairy Farmer. Des Moines, 1920-29.
Live Stock and Dairy Journal. Fresno, Calif., 1903-16.
Michigan Dairy Farmer. Detroit, 1909-15.
Continued as
Brownell's Dairy Farmer. Detroit, 1915-17.
Milk Man. Kansas City, Mo., 1908-10.
Milk News. Chicago, 1892-27.
Milk Reporter. Sussex, N.J., 1885-1928.
Minnesota Dairyman. See Heatwole's Dairy Paper.
Monthly Bulletin of the American Jersey Cattle Club. Newport, R.I.,
New York, etc., 1877-81.
Monthly Journal of Agriculture. New York, 1845-48.
National Butter and Cheese Journal. See Butter, Cheese and Egg
Journal.
National Butter Journal. See Butter, Cheese and Egg Journal.
National Cheese Journal. See Butter, Cheese and Egg Journal.
National Dairyman. Kansas City, Mo., 1892-96.
Nebraska Dairyman and Up-to-Date Farmer. Lincoln, 1899-1909.
Continued as
Dairy Gazette. Lincoln, 1909-10.
New England Farmer. Boston, 1822-46.
New York Produce Review and American Creamery. See American
Creamery.
Northwest Dairyman. See Heatwole's Dairy Paper.
Northwest Dairyman and Farmer. See Northwest Horticulturist,
Agriculturist and Dairyman.
Northwest Dairyman and Horticulturist. See Northwest Horticultur-
ist, Agriculturist and Dairyman.
Northwest Horticulturist, Agriculturist and Dairyman. Tacoma and
Seattle, Wash., 1895-1913.
Continued as
Northwest Horticulturist and Dairyman. Tacoma and Seattle,
Wash., 1913-17.
Continued as
Northwest Dairyman and Horticulturist. Tacoma and Seattle,
Wash., 1917-21.
Continued as
Northwest Dairyman and Farmer. Seattle etc., Wash., 1921-32.
Northwest Horticulturist and Dairyman. See Northwest Horticultur-
ist, Agriculturist and Dairyman.
Northwestern Creamery Journal. Minneapolis, Minn., 1898-99.
Northwestern Dairyman. St. Paul, Minn., 1908-11.
Ohio Cultivator. Columbus, 1845-62.
Pacific Coast Dairyman. Tacoma, 1895-98.
Pacific Dairy Review. See Dairy and Produce Review.

Practical Dairyman. New York. 1907-?. Published in Sept., 1907, as the American Farmer. See Chapter 9, note 41.

Practical Dairyman. See Practical Dairyman and Agriculturist.

Practical Dairyman and Agriculturist. Chatham, N.Y., 1895-98.

Continued as

Practical Dairyman. Indianapolis and New York, 1898-99.

Continued as

Practical Dairyman and American Stockman. Indianapolis and Spencer, Ind., 1899-1900.

Practical Dairyman and American Stockman. See Practical Dairyman and Agriculturist.

Prairie Farmer. Chicago, 1843-58.

St. Paul Dairy Reporter. St. Paul, 1897-99.

Continued as

Dairy Reporter. St. Paul, 1899-1903.

Sheboygan County News. Sheboygan Falls, Wis., 1876-1909.

Continued as

Sheboygan County News and Market Reporter. 1909?-192?

Continued as

Dairy Market Reporter. Sheboygan Falls, 192?-29.

Continued as

Cheese Reporter. Sheboygan Falls, 1929-.

Southern Dairy Products Journal. Atlanta, 1927-.

Western Farmer and Dairyman. Mankato, Minn., 1905-6.

Continued as

American Farmer. Mankato, Minn., 1907-14?.

Western Reserve Farmer and Dairyman. Jefferson, Ohio, 1852.

Books, Pamphlets, and Articles

Alden's American Newspaper Catalogue. Cincinnati, 1882-88.

Alvord, Henry E. "Dairy Development in the United States," Year-book of the United States Department of Agriculture, 1899.

Washington, D.C., 1899.

Ayer's Newspaper Annual. Philadelphia, 1880-1909.

Continued as

Ayer's American Newspaper Annual and Directory. Philadelphia, 1910-1929.

Continued as

Ayer's Directory of Newspapers and Periodicals. Philadelphia, 1930-1950.

Babcock, S. M., and Russell, H. L. "Influence of Temperature on the Ripening of Cheese," Annual Report of the Agricultural Experiment Station of the University of Wisconsin (Madison, 1897), pp. 194-210.

Babcock, S. M., Russell, H. L., Vivian, A., and Baer, U. S. "Cold Curing Cheese," Annual Report of the Agricultural Experiment of the University of Wisconsin (Madison, 1904), pp. 217-19.

Bardolph, Richard. Agricultural Literature and the Early Illinois Farmer. Urbana, Ill., 1948.

Barnett, Claribel R. "The Agricultural Museum; An Early American Agricultural Periodical," Agricultural History, II (Apr., 1928), 99-102.

- Bidwell, P. W. "The Agricultural Revolution in New England," American Historical Review, XXVI (July, 1921), 691.
- Bidwell, P. W., and Falconer, J. I. History of Agriculture in the Northern United States, 1620-1860. New York, 1941.
- Buck, Solon J. The Granger Movement. Cambridge, Mass., 1913.
- . The Agrarian Crusade. New Haven, 1920.
- Burland, Rebecca. A True Picture of Emigration, ed. M. M. Quaife. Chicago, 1936.
- Chang, Eva C. "A History of the Appeal to Women Readers in American Periodicals." Unpublished M.S. thesis, Columbia University, 1925.
- Crawford, N. A., and Rogers, C. E. Agricultural Journalism. New York, 1926.
- Curti, Merle. Growth of American Thought. New York, 1943.
- Cyclopedia of American Agriculture, ed. L. H. Bailey. 4 vols. London, 1907-9.
- Demaree, Albert L. The American Agricultural Press, 1819-60.
- Edwards, Everett E. "American Agriculture—The First 300 Years," Yearbook of Agriculture, 1940. Washington, D.C., 1940.
- Forsythe, S. M. The Story of Bovine Tuberculosis. London, 1949.
- Fox, Rodney. Agricultural and Technical Journalism. New York, 1952.
- History of the World's Columbian Exposition Held in Chicago in 1893, ed. Rossiter Johnson. 4 vols. New York, 1897-98.
- Holt, Frank John. "The Agricultural Press of America, 1792-1850." Unpublished M.S. thesis, University of Wisconsin, 1925.
- Johnston, Florence W. "Contemporary News Stories of Iowa Press Meetings, 1858-1916." Unpublished M.S. thesis, State University of Iowa, 1932.
- Kline, Allan. "What the Farmers Want," The Annals of the American Academy of Political and Social Science, CCLX (Sept., 1948), 122-27.
- Lightner, Otto C. The History of Business Depressions. New York, 1922.
- Lin, Yutang. My Country and My People. New York, 1939.
- Loehr, Rodney C. "Self-Sufficiency on the Farm," Agricultural History, XXVI (Apr., 1952), 37-41.
- Longsdorf, Lisle Leslie. "The Agricultural Press of America, 1850-1900." Unpublished M.S. thesis, University of Wisconsin, 1926.
- Macy, Katherine Young. Notes on the History of Iowa Newspapers, 1836-1870. ("State University of Iowa Extension Bulletin," No. 175.) Iowa City, 1927.
- Merk, Frederick. Economic History of Wisconsin During the Civil War Decade. Madison, 1916.
- Mott, Frank Luther. A History of American Magazines, vol. II (1850-65). Cambridge, 1939.
- . "List of Unpublished Theses in the Field of Journalism," Journalism Quarterly, XIII (1937), 330-55.
- Nafziger, Ralph Otto. "The History and Influence of the Farm Press in Wisconsin." Unpublished M.S. thesis, University of Wisconsin, 1920.

- Nichols, William. "A Price Policy for Agriculture, Consistent with Economic Progress, That Will Promote Adequate and More Stable Income from Farming," Journal of Farm Economics, XXVII (1945), 743-51.
- Ogilvie, William E. Pioneer Agricultural Journalists. Chicago, 1927.
- Pirtle, T. R. History of the Dairy Industry. Chicago, 1926.
- Reall, Joseph H. Dairying and Dairying Improvements. New York, 1882.
- Rogers, Charles Elkins. "Studies in Agricultural Journalism." Unpublished M.S. thesis, Kansas State Agricultural College, 1926.
- Rowell's American Newspaper Directory. New York, 1883-88.
- Ruede, Howard. Sod-House Days, Letters from a Kansas Homesteader, 1877-78, ed. John Ise. New York, 1937.
- Schmidt, Paul Marcus. "The Dairy Industry in America," Crop Reporting Service Bulletin, No. 200 (Wisconsin Department of Agriculture, 1939), 91-97. (A bibliography.)
- Seaman, Gerald LeRoy. "A History of Some Early Iowa Farm Journals (before 1900)." Unpublished M.S. thesis, Iowa State College, 1942.
- Shannon, Fred. America's Economic Growth. 3d ed.; New York, 1951.
- . The Farmer's Last Frontier. New York, 1945.
- Skinner, John S. and Guénon, Francis. A Treatise on Milch Cows, with Introductory Remarks and Observations on the Cow and the Dairy. New York, 1846.
- Smith, Hubert W. "The Relation of the Farm Press to Social and Economic Trends in Agriculture." Unpublished M.S. thesis, Northwestern University, 1933.
- Stuart, James. Three Years in North America. 2 vols. New York, 1833.
- Stuntz, Stephen Conrad. List of the Agricultural Periodicals of the United States and Canada Published During the Century July 1810 to July 1910, ed. Emma B. Hawks. ("U.S. Department of Agriculture Miscellaneous Publications," No. 398.) Washington, D.C., 1941.
- Taylor, Carl C. The Farmers' Movement, 1620-1920. New York, 1953.
- Trimble, William. Introductory Manual for the Study and Reading of Agrarian History. Fargo, N.D., 1917.
- Tucker, Gilbert M. American Agricultural Periodicals; An Historical Sketch. Albany, 1909.
- Union List of Serials in the United States and Canada, ed. Winifred Gregory. New York, 1927.
- United States Census, reports for 1870, 1880, 1890, 1900, 1910, and 1940.
- United States Commissioner of Agriculture. Annual Report, 1865. Washington, D.C.
- Watson, Elmo Scott. History of Auxiliary Newspaper Service in the United States. Champaign, Ill., 1923.

Index

- ABBOT, Willis J., 117
 Abolitionist, 35
 Abortion, bovine: believed not contagious, 32; cures, 32; proved contagious, 149; and undulant fever, 201; editors comment on, 201-2, 241-42, 271; called Bang's disease, 241; eradication program, 242, 271; called brucellosis, 271; mentioned, 219
 Acidimeter: cheese test, 161
 Adamson Law, 210
 Adulteration, food: starters as, 120; oleomargarine a form of, 122, 146; in general condemned, 126, 292; of milk, 126, 255; of butter, 126, 146, 168, 209; and butterfat, 209
 Advanced registry: explained, 170-71
 Advertising: Dairyman's Record, 27; appeals for, 36; for separators, 53, 350; for cattle, 57; Jersey Bulletin, 57, 378; Guernsey Breeders' Journal, 58; boiler plate, 73, 74; shortage, 93; editors comment on, 142, 206-8, 257-58; for milking machines, 162; of dairy products, 165, 206-7, 237-38, 257; textual, 180-81; to end depression, 206; pooled, 240; Second World War, 251; Holstein-Friesian Register, 283; Holstein-Friesian World, 287-88; Creamery Journal, 289; Ice Cream Trade Journal, 294-95; mentioned, 125, 168, 199, 236. See also Promotion of dairy foods
 Agglutination test, 242. See also Abortion, bovine
 Agricultural Economics, Bureau of, 211
Agricultural Epitomist, 94
 Agricultural journals: and agricultural societies, 9; developments, 10; editors comment on, 19. See also Dairy farm journals
Agricultural Museum, 11
 Agricultural societies: support journals, 6, 9, 26, 31, 155-56; formation of early, 8; function, 8-9; fairs, 9; revival, 9; political action, 77-78
 Agriculture, U.S. Department of: founded, 10, 40; regulations, hoof-and-mouth, 201; oleo, 237; fluid milk, 239. See also Federal regulation
 Agriculture: development, 1810-59, 6-10; dairying, 16. See also Dairy farming
 Alabama: journals begun in, 203
 Alderney cattle: Skinner favored, 11-12; Buel favored, 14
 Alfalfa: editors recommend use, 170, 201, 221, 282. See also Feeds
 Allen, Anthony B.: co-founder and editor, American Agriculturist, 16; on foreign breeds, 16, 21-22
 Allen, R. L.: co-founder and editor, American Agriculturist, 16; on breeding, 16, 21-22
 Alvord, Henry E., 343
American Agriculturist: cheese-making, 16; buttermaking, 16; feeding and care, 16; veterinary medicine, 17; breeding, 21-22; Dairyman's Record, 28
American Butter and Cheese Review: price fixing, 256-57; oleo tax, 262; tariff, 264; Korean War, 272
American Butter Review: Second World War, 252; oleo tax, 262;

American Butter Review (cont.): cream grading, 267; butter packaging, 267; mentioned, 96. See also American Produce Review

American Cheesemaker: history of, 71; location, 73; cheese starters, 146; Tolstoy, 159; fluid milk distribution, 191; mentioned, 141

American Creamery: history of, 71-72; Fred H. Kimball, 80; fires, 85; defends S. M. Babcock, 87; moved to Chicago, 97; Columbian Exposition, 98, 101; dual-purpose cattle, 106; frozen foods, 237; radio, 238; Creamery Journal, 290; mentioned, 91, 96, 104. See also New York Butter Trade; New York Produce Review

American Creamery and Poultry Produce Review: oleo tax, 235; mentioned, 95. See also New York Produce Review

American Creamery Operator and the Milk and Ice Cream Plant: begun, 203

American Dairy Association, 262

American Dairy Goat News: begun, 227

American Dairyman: history, 44, 51; Babcock test, 86-87; mentioned, 136, 137. See also Practical Dairyman

American Egg Review, 96. See also American Produce Review

American Express Company, 275

American Farmer (Baltimore): on dairying, 11, 12, 13

American Food Journal, 360

American Guernsey Cattle Club: and Hoard's Dairyman, 58; begins Guernsey Breeders' Journal, 94, 178; begins Guernsey Breeders' Sale List and Bulletin, 158

American Jersey Cattle Club: motion pictures, 200; history of, 327; mentioned, 377

American Medical Association, 236

American Milk Review: milk strikes, 233; labor, 233, 269-70; milk cartons, 244-45; price

risers, 257-58; Taft-Hartley Act, 269-70; mentioned, 96. See also New York Produce Review

American Produce Review: fluid milk distribution, 228-29; milk cartons, 244-45; mentioned, 96. See also New York Produce Review

American Shorthorn Gazette: history of, 74

American Stock Journal: on horses, 37; mentioned, 27

American Turf Register, 13

Angora Journal, 177

Annatto. See Butter coloring, artificial

Antibiotics, 270

Antimonopoly: laws, 81; public utility, 228; milk distribution, 228. See also Monopoly; Trusts

Anti-Oleo News, 79

Antitrust laws: butter market, 191. See also Monopoly; Trusts
Arnold, Lauren B.: writer, Dairyman's Record, 27; invents curd cutter, 36; biography of, 318

Artificial butter color. See Butter coloring, artificial

Artificial insemination: history of, 266; editors comment on, 266-67; extent of, 267

Association: breeders' founds journal, 57; founds Colorado Dairyman, 157; for marketing, 210; creamery managers, 234. See also Breed associations

Audit Bureau of Circulation, 280

Automation: of buttermaking, 267

Automobile: editors comment on, 144; uses of in dairy industry, 161, 192, 215, 239, 297; editors urge use of, 192, 195; stimulates editorial interest in roads, 215; tank trucks, 239; in Second World War, 268

Ayrshire cattle: praised by editors, 16, 28; criticized, 62, 63, 82; Ayrshire Digest founded, 177; mentioned, 13

Ayrshire Digest: begun, 177; pools advertising, 240

BABASSU oil, 230

Babcock, Stephen M.: butterfat test, 86; attacked, 86-87; de-

- fended, 87; cold-curing cheese, 145; mentioned, 282
- Babcock test: introduced, 86; editors comment on, 86-88, 107, 126; importance of, 92; butterfat payments, 92, 164; Columbian Exposition, 99; in cattle testing, 99, 118, 127, 164; cheating, 191; comments of D. H. Jenkins on, 276, 277; Hoard's Dairyman, 280; Jersey Bulletin, 333-34; mentioned, 136
- Bacheller, T. T., of Northwestern Dairyman: on centralizer, 154
- Back-to-the-land movement: editors comment on, 248, 351-52
- Bacteria: found in oleo, 48; to flavor butter, 90, 120, 197; tuberculosis, 119; fluid milk, 122, 146; cheese flavor, 146, 197; proscribed as starter, 197; in ice cream, 197; bovine abortion, 201. See also Starters; Tuberculosis; Veterinary medicine
- Bacteriology: advances in, 91, 245; and cleanliness, 91, 119, 197; veterinary medicine, 91; and dirt, 119; disease, 119, 197; cheesemaking, 146; mentioned, 122. See also Koch, Robert; Pasteur, Louis; Veterinary medicine
- Bailey, J. W., 379
- Bang's disease. See Abortion, bovine
- Barn Equipment Association, 251, 252
- Barns. See Cattle, care of
- Barrick, L. N., of National Dairyman, 76
- Barry, L. F., of New York Produce Review, 95
- Bateham, M. B.: of Ohio Cultivator, 19; on milk sickness, 21
- Battelle, Phil, 238
- Beekman, J. P., of Cultivator, 14
- Belgian Relief Committee, 184
- Bennett, E. C., 73
- Bennett, James Gordon: New York Herald, 299
- Bentham, Jeremy, 188
- Best, Mary, 118
- Beula Borden: birth of, 246
- Bible: Deuteronomy on oleo, 288
- Bishopp, B. G. D., of Colorado Dairyman, 158
- Black, Frank, of Ice Cream Trade Journal, 294
- Black and White Record: history of, 177, 287
- Bland-Allison Act, 77
- Blemer, Charles, of Live Stock and Dairy Journal: bovine T.B., 139-40
- Blooded Stock: history of, 94
- Blosser, E., 219
- Blue Valley Bulletin: history of, 297, 348
- Boiler plate: described, 73; dairy, 73; history, 325; mentioned, 75
- Booker, A. S., 379
- Book farming: farmers resist, 20, 51, 58, 149, 316; mentioned, 39. See also Circulation; Education
- Book reviews: in journals, 81, 159, 195
- Boosting, 206. See also Advertising; Promotion of dairy foods
- Bootlegging: ice cream, 238, 259
- Borden, Gail, 34
- Borden Milk Company: trust threat, 188; milk cartons, 244; mentioned, 246
- Borden's Farm Products Division: milk cartons, 244
- Borman, T. A., of Kansas Dairy Farmer, 114; Dairy Age, 114; dairy cattle, 127
- Borman and Shawhan, of Kansas Dairy Farmer, 114
- Borrowing: from other journals, 13, 129-30, 251; examples, 20, 25, 33, 34, 80, 345; inspiration, 34, 102; extent, 68, 129-30, 251; Europe, 102; nearly ends, 251; from oneself, 364. See also Editorial policy; Information, source of; Subject matter
- Bovine abortion. See Abortion, bovine
- Bovine tuberculosis. See Tuberculosis
- Brannan, Charles: and his plan, 255-56
- Brannan Plan, editors comment on, 255-56; 373; mentioned, 272. See also Price supports

- Breed associations: coöperative ownership of bulls, 200, 223
- Breeder and Dairyman: begun, 203
- Breeders, cattle: influence, dairying, 45; terminology of, 45; Jersey, 56-57, 62, 200; Guernsey, 57, 61, 62, 158, 200; amity between, 62, 200; Holstein, 74; importance of, 83; disputes, 148, 200, 344; in Second World War, 185; react to quarantines, 201; in depression, 204, 240; shortcomings of, 221, 240. See also Cattle breeding
- Breeder's Gazette: opposes public cattle-testing, 83
- Breeding. See Cattle breeding
- Breed journals: early history of, 45-49; influence of, 45; general, 74; content, 134-35, 223; animosity ends, 223, 240, 266. See also Guernsey Breeders' Journal; Holstein-Friesian Register; Holstein-Friesian World; Jersey Bulletin
- Breeds, cattle: editors comment on, 11-13, 14-15, 37-38, 61-63, 106, 170, 199-200, 221-23, 266-67; merits of different breeds, 14-15, 28, 54, 100-102, 200; single-purpose, 15, 92; farmer attitudes, 22, 28, 83; purebreds, 22, 54, 61, 200; for dairying, 126-27, 200; mentioned, 45, 170. See also Cattle breeding; Scrub
- Brewery: as dairy plant, 179-80, 217-18. See also Prohibition
- Brooklyn Eagle, 294
- Brown, Charles G.: co-founder and co-editor, Holstein-Friesian World, 134, 287; literary criticism, 135; on Robert Burns, 135; on John G. Whittier, 135; translates French, 135; agricultural education, 160; freedom of press, 173; literary objectives, 288; early activity, 382. See also Holstein-Friesian World
- Brown, Ira, of Holstein-Friesian World, 287
- Brown, R. D.: cattle breeds, 28
- Brown, Royer H.: milk prices, 185; pasteurization laws, 220-21; editor and owner, Jersey Bulletin, 275; policies of, 277-79
- Brown, Thomas, of Ohio Farmer, 25
- Brownell, George: founder, Michigan Dairy Farmer, 156; farm labor, 186, 193; prohibition, 174
- Brownell's Dairy Farmer. See Michigan Dairy Farmer
- Brown Swiss Breeders' Association, 240
- Brown Swiss Bulletin: begun, 203
- Brown Swiss cattle: called dual-purpose, 106
- Brucellosis. See Abortion, bovine
- Bryan, William Jennings, 117
- Budget, Bureau of, 263
- Buel, Jesse: editor, Cultivator, 14; ideas on breeding, 14; sells Cultivator to Luther Tucker, 15
- Bulletin of the American Devon Cattle Club: history of, 74
- Bulls: coöperative ownership of, 200; purebred advised, 222; caution in handling, 222, 265. See also Breed associations; Cattle breeding
- Burbank, Luther: spineless cactus, 201
- Burch, D. S.: Butter, Cheese and Egg Journal, 177, 382
- Burch Publishing Company: Dairy World, 44
- Bureaucrats: criticized, 180-81, 253-54. See also Politics
- Burns, Robert: compared with Whittier, 135
- Burridge, E. I.: American Creamery, 71, 72; comments on Farm and Dairy, 96; Columbian Exposition, 98; butter refrigeration, 334
- Business: consolidation of, 210; big, not trusted, 229. See also Trusts
- Butter: for local trade, 24, 238; composition, 33; production areas, 43; merchants, 72; monopoly, 72, 165; verse, 81; higher quality urged, 85, 89, 166; quality of, usually low, 85, 89, 166; creameries make best, 88-89; packaging, 89, 267; oleo competition forces improvement

- in, 89, 169, 214; preservatives, 108, 334; mottles, 108, 337; mold, 119, 145-46, 197, 344. See also Centralizer; Process butter
- Butter and Cheese Journal: and depression, 227; higher wages for cheesemakers, 233; on promotion, dairy foods, 237-38; butter selling, 238. See also Butter, Cheese and Egg Journal; National Butter and Cheese Journal
- Butter, Cheese and Egg Journal: history of, 177-78, 296-97; inflation, 179; centralizer, described, 188; health laws, 189; Elgin, 191; cream grading, cheese, 196; butter color, 196; ice cream, 197; coöperatives, 211; wants higher wages, 215; prohibition, 217; buttermaking, 218; circulation figures, 296; mentioned, 291. See also National Butter and Cheese Journal
- Butter, Cheese and Milk Products Journal: laws on retailers, 259; dairy food promotion, 262; history of, 296. See also National Butter and Cheese Journal
- Butter coloring, artificial: general problem, 59, 60, 128, 164, 196, 261, 323, 343; Jenkins on, 59, 136; Jersey Bulletin, 136, 276; Fuller, 136; resistance to, 136, 145, 276; Woodrow Wilson, 183; controversy resurrected, 261; Hoard's Dairyman, 280
- Butterfat: standards for ice cream, 197; standards for butter, 209; in butter and ice cream, related, 258. See also Babcock test; Buttermaking; Cream; Ice cream manufacture
- Butter industry: not organized, 164; prices, 179, 254; and ice cream, 197; opposed to rationing, 253, 254; price supports, 258, 262. See also Centralizer; Cream grading
- Butterine. See Oleomargarine
- Buttermakers' Publishing Company: Creamery Journal, 289
- Buttermaking: instructions, 12-13, 18, 33, 59, 90, 107-8, 145-46, 218, 224, 267, 289, 290-91; separator introduced, 53; farm vs. creamery, 88, 143; starters, 90, 108, 120, 146; cleanliness urged, 108, 162; use of adulterants, 146, 168; automation in, 267; mentioned, 119. See also Centralizer; Cream grading
- Buttermilk: alcoholic content of, 207. See Prohibition
- CACTUS, spineless: as cattle feed, 200-201
- Caldwell, William H., of Guernsey Breeders' Journal, 178
- California: dairy papers founded in, 116, 138, 177, 203, 227, 347
- California Dairyman: begun, 203
- California Dairy News: begun, 203
- California Farmer, 28
- Canada: milk standards of, 182; to benefit from McNary-Haugen Bill, 212. See also Foreign trade; Reciprocal trade agreements
- Canadian Reciprocity Treaty: editors comment on, 183
- Canal. See Erie Canal
- Carbonated drinks: competition of, 207
- Casein: use for, 267; mentioned, 191
- Cattle: as workers, 14-15; European, fate in war, 184-85; history of, mentioned, 218; shows, 247
- Cattle, care of: pens, 12; humane, urged, 17, 18, 32, 68-69, 82, 221-22; winter shelter, 17, 29, 82, 171-72; full feeding, 17; status, 1850-60, 17; status, 1840, 82; Hoard on kindness, 68-69, 221-22; scientific discoveries about, 245; de-horning, 285. See also Feeding, cattle
- Cattle breeding: editors comment on, 11-13, 13-14, 21-22, 58, 61-63, 82, 83, 106, 126, 147-48, 170-71, 199-200, 221-23, 240-41, 266-67; general-purpose, favored, 14, 126; inherited characteristics, 21, 54, 148; purebreds, 21, 22; versus buying, 28, 118; evolution and, 54; single-purpose, favored, 58, 82, 92, 126, 200; sex determination, 61; advances in, 200, 240-41, 267; ar-

Cattle breeding (cont.):
 tificial insemination, 266-67;
 mentioned, 46, 83, 266, 351. See
also Guénon, François; Scrub
 "Cattle Husbandry": name of first
 dairy column, 14

Cattle testing. See Cow testing

Caven, George: editor, Chicago
Dairy Produce, 168; poor butter,
 168-69; storage laws, 182; Elgin
 merchants, 191; cream grading,
 196; oleo, 198, 199; chain stores,
 208

Censoring. See Freedom of the
 Press

Centralizer: system grows, 123;
 operations described, 143-44,
 166-67, 188; monopolistic tend-
 ency, 143-44, 188; and filthy but-
 ter, 144; editors comment on,
 154-55, 166-67, 188, 190-91,
 211, 292, 346-47, 350; versus
 coöperatives, 166-67; and Bab-
 cock test, 191; laws regulate, 211;
 process butter, 214; attack on
 stops, 243; mentioned, 167, 217.
See also Buttermaking; Coöper-
 atives

Certified Milk Magazine: begun,
 203, 227

Chain stores: editorial criticism
 of, 208-9. See also Retailers

Champion Dora Korndyke: cow,
 380-81

Champlain, L.: Milk Man, 153; on
 editorial objectives, 153-54

Cheese: poisoning, 18; trade, Erie
 Canal, 19, 25; durability, 24-25;
 regions of specialty, 25, 43; ex-
 hibit, Columbian Exposition, 97;
 and Babcock test, 99; artificial
 color, 136, 164; factory inspec-
 tion, 141; cold curing, 145;
 canned, 191; buttermilk, 191;
 made by brewers and distillers,
 217-18; in Wisconsin, promoted,
 238. See also Cold curing of
 cheese; Filled cheese

Cheese and Dairy Journal: history
 of, 140-41; factory cleanliness,
 145; mentioned, 133

Cheese and Dairy Journal and
Creamery Reporter. See Cheese
and Dairy Journal

Cheesekraft: begun, 203

Cheesemakers: qualities needed,
 59; journal for, 71; own a journal,
 115-16; union, higher wages,
 215-16; encouraged to organize,
 233

Cheesemaking: details become
 specific, 18; factories begun, 19;
 chief interest, Dairy Farmer, 36;
 instructions on, 59, 126, 145, 146,
 218, 224, 243, 292; factory oper-
 ation, 59, 196; as an art, 59; for-
 eign types, 145; starters used,
 146; rind losses, 191; cream
 grading, 196; home, 224; men-
 tioned, 161. See also Cheese;
 Starters

Cheese Reporter: history of, 347-
 48

Chicago, Illinois: growth, 8; as
 dairy market, 50; primary butter
 market, 67; butter market and
 Elgin, Illinois, 72

Chicago Dairy Produce: history
 of, 95; adulterants, 121; oleo,
 143, 146, 168-69, 198, 199, 213;
 sales of oleo related to butter,
 143, 168-69; expansion, dairy-
 ing, 144; German-American
 farmers, 149; dairying and de-
 pression, 175; government regu-
 lations, 182; Farm Loan Act,
 186; Elgin, 191; cream grading,
 196; oleo publicity, 199; becomes
Dairy Produce, 204; dealers,
 206; vitamins and oleo, 213; men-
 tioned, 182

Chicago Markets. See Chicago
Dairy Produce

Chicago Produce: history of, 95;
 carries verse, 104; rail strike,
 1894, 104; on oleo, 105; pasteur-
 ization, 108; business conditions,
 109; rail rates, 109-10; flies in
 creameries, 119; comments by
 H. C. Wallace, 130. See also Chi-
cago Dairy Produce

Chicago World's Fair, 1893. See
 Columbian Exposition

Chicago World's Fair, 1932: men-
 tion in press, 248-49

China: cheese trade, 18-19; but-
 ter market, 126

Chris Hansen Laboratory: Junket,
 90; location of, 317

Churning. See Butter; Buttermaking

- CIO. See Committee for Industrial Organization
- Circulation: general farm papers, 19-20, 149; among farmers, 63; efforts to increase, 127, 149; for western journals, 127; and education level, 149, 160; for certain journals, 250. See also Book farming
- Cities, growth of: amount and rate, 7, 8; influence on dairying, 7, 23, 43, 156, 157, 169, 176, 193; offers markets, 67, 151, 172; fluid milk use, 122; and use of separator, 167; and goat milk, 172; and extension of dairying, 176; farm labor shortage, 193. See also Cities, markets of; Marketing advice; Metropolis
- Cities, markets of: and dairy farming, 10, 24, 49, 67, 71, 169; commercial dairying, 24, 169; dairy press, 73. See also Cities, growth of
- City: public health laws, 162, 163, 189, 190, 219-20; influence on tuberculosis eradication, 163, 219-20; farm, conflicts, 248. See also Marketing advice; Metropolis; Pasteurization; Tuberculosis
- Civil Servants. See Bureaucrats; Politics
- Civil War: just before, 31; and publishing costs, 36; affects dairying, 42, 43; foreign trade, 102; mentioned, 51, 274, 279
- Clark, J. E., of American Dairyman, Butter, Cheese and Egg Reporter, 44
- Cleanliness: editors insist on, 12-13, 54, 107-8, 119, 138-39, 145-46, 162-63, 197, 224, 239, 245, 268, 286; on farms, 54, 139, 162, 197, 201, 239; for manufacturers, 107-8, 119, 197, 245; economic advantages, 119; for distributors, 138-39, 245; associated with bacteriology, 197; abortion preventative, 201. See also Bacteriology; Buttermaking; Cheesemaking; Ice cream manufacture
- Clipping. See Borrowing; Editorial policy
- Coburn, F. D.: quoted, 335
- Cocoanut oil: oleo, used in, 213, 236
- Colby, H. E., of Holstein-Friesian World, 287
- Cold curing of cheese: process, 145; in press, 145, 150
- Cold storage lockers: as sideline, 243-44, 258; in depression, 244. See Ice cream manufacture
- Collective bargaining. See Labor problems; Milk strikes
- College. See Education
- Colman's Rural World: on milking, 54; mentioned, 330
- Colorado: dairy journals founded in, 157, 203
- Colorado Dairyman: history of, 157-58
- Coloring. See Butter coloring, artificial
- Columbian Agricultural Society, 11
- Columbian Exposition: plans for, 84; nature of, 96-99; agricultural exhibits, 96; editors react to, 97, 102, 200, 278; dairy division, 97, 98; breed test, 99-100, 101, 102, 200; Guernsey Breeders' Journal, 200; Jersey Bulletin, 200, 278; Holstein entry, 329; mentioned, 111, 133, 149, 249
- Columns: in dairy journals, early history of, 158-59; range of, 218. See also Editorial policy; Human interest
- Commerce. See Foreign trade; Tariff; Trade, domestic
- Commercial dairying: change to, 24; influence on dairy press, 24; mentioned, 43
- Commissioner of Patents: reports serve editors, 20. See also Borrowing; Agriculture, Department of
- Committee for Industrial Organization (CIO): on farmer side in milk strike, 233; mentioned, 234, 270. See also Labor problems; Lewis, John L.; Milk strikes
- Communards: and oleo, 48
- Competition: trouble from, 188; freedom of, 209-10; from breweries, 217-18. See also Economic theory

- Concentrated Milk Industries: history of, 177-78, 296. See Butter, Cheese and Egg Journal
- Condensed milk: to make, 34; frauds of, 99; mentioned, 206. See also Filled milk
- Confectionery and Ice Cream World: begun, 203
- Conflicts: Hoard vs. Jenkins, 70; farmer vs. middleman, 78; between various editors, 78-81, 113; trade and technical vs. farm journals, 145, 186-87, 188, 215; between groups of milk producers, 233; dairy industry vs. retailers, 238; urban vs. rural, 248
- Congress: editors criticize, 231, 263. See also Politics
- Connecticut: dairy journal founded in, 203
- Connecticut Milk Producers' Association Bulletin: begun, 203
- Consumer: interest in welfare of, 138, 143, 189-90; reaction to poor butter, 169; unimpressed by vitamins, 199; low income of, 228; editors oppose subsidy for, 254, 255; explain price rises to, 258. See also Public health
- Conventions: of creamerymen, reported, 85; column on, Creamery Journal, 289; reports on, Ice Cream Trade Journal, 294. See also Human interest
- Cooking fats: editors oppose, 214, 236, 261; federal tax on, 236. See also Oleomargarine
- Cookson, Thomas P., 80
- Coöperation: owning bulls, 200, 223; editors endorse, 207; owning farm machinery, 239-40
- Co-operative Dairy Farmer: begun, 203
- Coöperatives: general farm, 69, 81, 211; editors comment on, 69, 81, 143, 154-55, 167, 188, 211; as response to trusts, 69, 211; centralizer, 154-55, 211; in dairy localities, 167; breed associations, 171; foreign, 182; federal laws on, 211; journals of, 239; Dairy Record, 239
- Copra. See Cocanut oil; Philippines Corporations. See Manufacturing; Monopoly; Trusts
- Correspondents: regular columns for, 218; importance of, 251. See also Information, source of
- Cortisone: in veterinary medicine, 270
- Cottonseed oil: and oleo, 236
- County agent: praised, 186
- Courts: and Grout Bill, 147; and centralizers, 211. See also Politics
- Country Gentleman: begun by Tucker, 22; begins first dairy column, 22; on buttermaking, 33
- Cow and Hen Journal: begun, 203
- Cow testing: as breed promotion, 64, 83, 170; public replaces private, 83; at fairs, 83, 99-100; for production, method, 83, 329; editors want farmers to, 83, 118, 147, 218, 240, 270, 278, 280; farmers refuse to, 83, 118, 127, 280; advanced registry, 170-71; associations for, 218, 222, 223. See also Cattle breeding
- Coxey's Army, 93
- Cream: separation techniques, 53; consumption of fluid, 122; on mush, 207. See also Butter; Buttermaking; Separator
- Cream Bulletin: begun, 347
- Creameries: supplant farm manufacture, 88-89; some fail, 109; construction advice, 122; and the centralizer, 143-44, 211; cleanliness urged by editors, 145; automobile truck used by, 161, 268, 361; operation, 168, 196, 208-9, 211, 259-60, 268; regulation, 211; competition, breweries and distilleries, 217-18; labor in, 234; cream collection, 268, 292; Jenkins, 277; number of, 1930, 292; advantages, 328; mentioned, 72. See also Butter; Buttermaking; Centralizer
- Creamery and Dairy: history of, 72-73
- Creamery Gazette: history of, 96; attacks middlemen, 124; favors dual-purpose cattle, 127; comments on borrowing, 129-30 "Creamery Hints," column, Creamery Journal, 85
- Creamery Journal: history of, 72, 250, 288-91; comments on other

- journals, 80, 96; on buttermaking 85, 162, 267; Babcock test, 86; milking machine, 90; Columbian Exposition, 98; foreign news, 102, 183, 263; on depression, 103, 231; newspapers, 105, 180; Election, 1896, 117; creamery building, 123; Spanish-American War, 131; trucks, 161; city health laws, 162; federal aid, tuberculosis, 163, 241; oleo, 164, 260; virtues of dairying, 169; dual-purpose cows, 171; safety, 181; cream market, 208; tuberculosis, 219; farm price support, 230, 255; dairy wages, 234; automation, 267; draft, 269; circulation of, 289; mentioned, 74, 79, 130, 246, 285
- Creamery Messenger: history of, 73
- Cream grading: to buy by quality, 163, 196, 224, 243, 267, 292
- Cultivator: begun, 14; first column, 14; on breeding, 14, 22; shelter, cattle, 17; spread of dairying, 19
- Curd. See Cheesemaking
- Curtis, T. D.: of Farmer and Dairyman, 49; silo, 52; oleo, 52-53; evolution, 54
- Cutler, Thomas D.: Ice Cream Trade Journal, 142, 293; farm price supports, 186-87; railroads, 192; biography of, 294, 382; mentioned, 184
- DAIRY (New York): history of, 320
- Dairy Age: history of, 114; dairy cattle, 127
- Dairy and Creamery: history of, 115; mentioned, 286
- Dairy and Farm: history of, 72
- Dairy and Farm Journal: history of, 50
- Dairy and Live Stock: founding, 347
- Dairy and Produce Review: history of, 116; mentioned, 138. See also Pacific Dairy Review
- Dairy and Stock Ranch: begun, 203
- Dairy Bulletin: history of, 155-56; compared, Colorado Dairyman, 157
- Dairy cattle: general improvement in, 63; single-purpose, 148; single-purpose, editors comment, 16, 148, 171, 200, 222, 280, 286; increase in, 179. See also Cattle; Cattle, care of; Cattle breeding
- Dairy Column: history of, 73; mentioned, 79. See also Boiler plate
- Dairy Farmer (Chariton, Iowa): history of, 50
- Dairy Farmer (Des Moines, Iowa): dairy cattle improvement, 204, 222-23; farm depression, 204, 205; federal aid, farm, 211; railroad rates, 214; breeding, 221; show ring, 221; farm electricity, 223-24; homemade cheese, 224-25; history of, 286; mentioned, 216
- Dairy Farmer (Little Falls, N.Y.): history of, 31-41; kindness to animals, 32; cheesemaking, 33; condensed milk, 34; information, source, 35; causes of failure, 40; mentioned, 24
- Dairy Farmer's Digest: begun, 227
- Dairy farming: invention of silo, 52; editors claim superiority of, 124, 205, 264; increase in, 264; changes in, 345-46. See also Dairying
- Dairy farm journals: histories of, by periods, 43, 49, 58, 134-40; editorial policies, 143-44; conflict with trade and technical journals, 186-87, 204, 214-15; want more farm aid, 187-88, 211-12; antiunion, 193; milk strikes, 215-16, 232-33; on prohibition, 217; breeds and breeding, 221; technology, 223; review, subject matter, 239-40. See also Breed journals; Dairy journals
- Dairy Farm Leader: begun, 203
- Dairy Gazette: history of, 115, 137, 286. See also Kimball's Dairy Farmer
- Dairy Goat Journal: begun, 203
- Dairying: significance in agriculture, 3-4; eastern farmers shift to, 7; commercial farming begins, 10; as part of farming, 16; as a specialty, 19, 38; commercial, effect on journals, 24; Erie Canal, 25; and soil fertility, 30;

Dairying (cont.):

economic conditions of, 42, 91-92, 114, 205; problems, 66; indepressions, 76, 114, 139; history of, 81, 218, 248; technology influences, 91-92; extension of, 144, 169; mentioned, 123, 151

Dairy Journal (Iowa): history of, 75

Dairy Journal (Oregon): begun, 203

Dairy journals: importance, commercial dairying, 24; founded, 1875-83, 42; summary of programs, 70; influence of agriculture, 73; farmer-merchant antagonisms, 78; reaction to Columbian Exposition, 101-2; number and kind, 133; influence of prosperity, 136; technical, histories, 140-42; old-new, compared, 142; local efforts at, 151-52; columns in, 158-59; prohibition, 174, 217-18; role of, in dairying, 301; reasons for failure, 346; efforts praised, 363. See also Breed journals; Dairy farm journals

Dairyman's Journal: begun, 177

Dairyman's League: activities of, 235

Dairyman's National Protective Association: antioleo, 79

Dairyman's Price Reporter: begun, 177

Dairyman's Record: history of, 26-31; information, sources, 27; type of information, 29-31; cheesemaking, 33; buttermaking, 33; mentioned, 24, 51, 104

Dairyman's Review: begun, 203

Dairy Market Reporter: history of, 342; mentioned, 133

Dairymen's League News: begun, 177

Dairy Messenger: history of, 75-76; farmer-middleman conflicts, 75; skim milk, 100; foreign news, 102; mentioned, 79

Dairy Papers Associated: begun, 227

Dairy Produce: history of, 204, 250; milk strikes, 205, 216; criticizes chain stores, 208; McNary-Haugen Bill, 212; labor problems,

216, 233, 234; separator, 218; government action in industry, 227-28, 229, 231, 232, 237; prohibition, 229; politics, 229, 231, 232; New Deal, 231; oleo, 237; promotion, cheese, 238

Dairy Products Merchandising:

begun, 203

Dairy Queen: editors comment on, 260

Dairy Record: history of, 72, 112, 115-16, 250, 291-93; collection of cream, 144, 239, 268; centralizer criticized, 166-67, 196, 211; political comments, 184, 229, 229-30, 243, 254, 255, 256, 270; preservatives, 190; cleanliness, insists on, 190; Elgin, butter, 191; dairy, Minn., N.D., 192; automobiles, use of, 192, 268-69; labor problems of, 193, 194, 234, 270; ice cream, 197, 259; tariff, 212; railroads, 214-15; milk distribution, 228; milk strike, 232; A.M.A. criticized, 236; cream grading, 243, 268; circulation of, 250, 291-92; farm price supports, 254, 255, 256; OPA, butter, 254; rationing, 254, 268-69; processor price supports, 256; advertising dairy foods, 257; oleo, 260, 261; virtues of dairying, 264; as school for editors, 293; mentioned, 141, 152, 177, 230, 261, 289, 296

Dairy Record Publishing Company: owns Dairy Record, history, 115, 291

Dairy Reporter: history of, 112, 115, 291. See also Dairy Record

Dairy World: history of, 44, 50, 51, 203, 275; favors creameries, 88; verse in, 104; drought, 107; enemies, 137; railroad rates, 144; adulterant, butter, 146; criticizes Knight and Hoard, 147; oleo, 147; dual-purpose cows, 147-48; mentioned, 79, 129, 136

Darrow, J. Wallace, of Practical Dairyman and Agriculturist, 94

Darwin, Charles: editorial reaction to, 53, 61; cattle breeding, influence on, 54; Darwinism, editors use, 135-36. See also Evolution

- D.D.T., insecticide, 270
- Delaware County Dairyman: history of, 321
- Delaware County Dairyman and Register: history of, 51
- Democrat and Dairyman: history of, 322
- Democratic party, 229, 230, 253
- Denver Milk Market Review: begun, 203
- Department of Agriculture, U.S. See Agriculture, U.S. Department of
- Depression: dairying withstands, 38, 43-44, 78, 103, 175, 205-6; post-Civil War, 42; post-Panic, 1873, 42; post-Panic, 1893, 103; of 1919-29, 204-6; 1929-41, 227-29; affects farming, 76-78; editors react to, 76, 77, 93, 103, 111, 116, 126, 204-6, 214, 227-29; related to oleo, 105, 121, 123; and creamery failures, 109; effects of, dairy industry, 111, 131; influence, dairy press, 111, 204-6; cow testing, 118; feeding, 118; advertising as a cure, 206; breeding, 223; home dairy manufacture, 224-25; price supports in, 256. See also Panic, 1837; Panic, 1873; Panic, 1893; Panic, 1907
- Devon cattle: Shorthorns, 13; general-purpose, 14; as dairy cattle, 15; journal for breeders of, 74
- Dewey, Admiral George: comments on, 131
- Diacetyl: butter flavor, 260-61
- Dietz, Mamie, of Hoard's Dairyman, 379
- Disease. See Bacteriology; Cleanliness; Veterinary medicine
- Distemper: cattle, 32-33
- Distribution: journals, 71; problems of, 168; of milk, a public utility, 228-29; door-to-door, 268-69. See also Trade, domestic
- District 50, U.M.W., 234
- District of Columbia: farm journal founded, 11
- Diversified farming: praised, 137-38; editors comment on, 169
- Draft: influence on dairy industry, 269; keep needed workers, 376. See also Labor problems
- Draper, J. L., of Dairy and Creamery, 115
- Drought: of the nineties, 107; editors comment on, 107, 118, 234-35, 368; influence of, feeding, 118; of the thirties, 235
- Dual-purpose cattle: Guernsey as, 62; Holstein as, 82; editors support, 106, 147-48, 171; no editors champion, 200, 222; J. J. Hill seeks, 200. See also Cattle breeding
- Durham cattle: as dairy cattle, 14, 15; as beef, not dairy, 63. See also Cattle breeding
- EASTERN Milk Producer: begun, 203, 227
- Eaton, A. W.: begins Dairyman's Record, 26; begins Dairy Farmer, 31; articles, short of, 35; sells Dairy Farmer, 35
- Eckles, C. H., author: cream testing, 297
- Economic problems: on environment, 66; editors comment on, 102-3, 116; 124-26, 228-29; and politics, 229, 272-73. See also Economic theory; Politics
- Economic theory: ideas of, editorial, 66, 111, 150, 174, 188, 206, 209-12, 228, 229, 230-31, 255-57; restrained free enterprise, 188; supply and demand, 209-10; individualism vs. collectivism, 229; Brannan Plan, 255; compared with practice, 357. See also Politics
- Edgerton, J. D., of Nebraska Dairyman and Up-To-Date Farmer, 115
- Editing: knowledge of needed, 295-96
- Editorial policy: general characteristics of, 26, 58-59, 92, 102-3, 110-11, 124, 134-35, 150, 175-76, 178-79, 190, 195-96, 201, 202, 206-7, 225-26, 249, 260, 272-73, 299-301; for newer papers, 124; for breed journals, 134-35; on substitutes, 260; full summary, 299-301
- Editorials: seldom separated from news, early, 58; farmer reaction, 66

- Editors: qualifications, 382
- Education: farmer attitudes, 10-11, 20, 58, 149; colleges, 11, 30, 161, 217, 299; editors as educators, 19-20, 65, 81, 127, 149, 153-54, 159-61, 216-17; agricultural opposition to, 127, 160; rural, inferior, 149; related to subscriptions, 160; influence on dairy journalism, 298-99. See also Book farming; Fairs
- Election of 1896: comments by editors, 117
- Election of 1912: editors express interest in, 182
- Election of 1948: influence of, oleo laws, 261
- Electricity: creameries as power plants, 161; first used in creameries, 161; appliances, 223; gasoline generator, 223; on the farm, 223-24; uses of, editors comment, 224
- Elgin (Illinois) Board of Trade: influence on butter price, 72; editors protect speculation of, 72, 109, 191, 334; best butter, 88
- Elgin Dairy Report: history of, 72, 204; journalists object to it, 72, 191; political ideas, 117, 186; milk monopolists, 125; quality, dairy produce, 143, 145-46; expansion of dairying, 144; St. Louis World's Fair, 150; Irish, 183; butter trade, 183, 191; roads for automobiles, 192; mentioned, 79, 117
- Ellenberger, H. B.: on artificial insemination, 266
- Emergency Relief (FERA): butter in program of, 231
- Emery, J. Q., Wisconsin food commissioner, 198
- England: free trade denounced, 49; mechanically refrigerated rail car, 162; hoof-and-mouth, experience, 182; war import restrictions, 183-84; butter dumping, 212; goats officially encouraged, 353
- Englehardt, F. E.: on ensilage, 52
- Ensilage. See Silo
- Ensilage of Maize and Other Green Fodder Crops, The, by Auguste Goffart: reviewed, 52
- Equipment. See Machinery, dairy
- Erie Canal: agricultural importance of, 8; connecting canals, importance of, 8; route for cheese, 19, 25; threat to, 49-50. See also Transportation
- Esch-Cummins Act: Hoard's Dairyman against, 210
- Estel, E. S., of Creamery Journal, 381
- Europe: cattle of, superior, 14; originates single-purpose concept, 15; scientific advances, 41; technological advances, 102, 161; editors borrow from periodicals of, 102; First World War, 185; Second World War, 237; post-war relief of, 263
- Evaporated milk. See Condensed milk; Filled milk
- Evolution: editors react to, 53-54; implications for breeders, 54; acquired characteristics, 148. See also Darwin, Charles
- Experiment Station. See Information, source of; Publications, governmental
- Express companies. See Railroads
- FAIRS: agricultural begun, 9; cattle testing and shows, 82; editorial comments, 149, 248-49. See also Chicago World's Fair, 1932; Columbian Exposition; New York World's Fair, 1940; Pan-American Exposition; St. Louis World's Fair; San Francisco World's Fair
- Farm Administration, 232
- Farm and Dairy (Ames, Iowa): history of, 75; mentioned, 96
- Farm and Dairy (Hulmeville, Pa.): history, note, 50
- Farm and Dairy (Salem, Ohio): begun, 177
- Farm and Dairy Herald: history of, 347
- Farm and Home: quoted, 69
- Farm Board: criticized, 230; mentioned, 205
- Farm dairies: creameries, 88, 143
- Farmer and Dairyman (Holton, Ga.): history of, 336

Farmer and Dairyman (Portland, Ore.): history of, 322

Farmer and Dairyman (Utica, N.Y.): history of, 49-50; on silo, 52

Farmers: contributed to dairy journals, 65; and middlemen, 78; and Babcock test, 86; eradication of tuberculosis, 110, 241; buy oleo, 236; buy substitutes, 260; union of, 269

Farmers' Club (Little Falls, N.Y.): supports Dairyman's Record, 26; meeting record, 28; information, Dairy Farmer, 31; proceedings, Mohawk Courier, 40

Farmers' institute. See Agricultural societies; Lyceum

Farmer's Protective League (California): antiunion, 193-94

Farm home: editors show interest in, 134-35; columns on, fore-shadowed, 181; column, Hoard's, 280

Farm labor: shortage of, 38-39, 186, 193, 194; legislation on, 194; machinery, 195, 239; and draft, 269. See also Labor problems; Machinery, dairy

Farm life: editors comment on comfort, 181, 246

Farm Loan Act, 186

Farm Relief Bill: editors approve, 231

Farragut, Admiral David C., 131

Features. See Columns; Human interest

Federal aid: for dairy industry, editors want, 126, 131-32, 163, 182, 194; in disease eradication, 163, 182, 241; in marketing, 178; for agriculture, 211, 230, 231-32. See also Price supports; Tuberculosis

Federal laws: ruin business of journals, feared, 186-87; editors view with alarm, 227-29; against filled milk, 260; against unions, 269. See Oleomargarine, laws against; Politics

Federal regulation: editors favor, 182; forces editors into politics, 182; editors want end of, 186, 250; in wartime, 250-52, 253; of milk prices, 257; suggested for

retailers, 259; mentioned, 294, 295

Federal Security Administration: and oleo, 237, 260-61

Federation Guide and Market News: founding, 203

Feeding, cattle: editors give advice on, 12, 17, 28-29, 32, 63-65, 82, 84, 107, 118, 172, 265, 282, 283, 287; full winter, editors urge, 17, 29, 82, 118; over-feeding, editors oppose, 64, 65; scientists relied on, 64. See also Cattle, care of; Feeds; Silo

Feeds: for drought areas, 107;

editors suggest, 200-201, 221.

See also Alfalfa; Feeding, cattle; Silo

FERA. See Emergency Relief

Fertilizer. See Manure

Fessenden, Thomas G.: New England Farmer, 12; ideas on dairying, 12-13; leaves New England Farmer, 15

Filled cheese: described, 121; opposed, 289. See also Cheese; Cheesemaking

Filled milk: first appears, description, 214; reaction to, 260

Fires: causes and frequency, 85-86; related to depression, 108; causes, creameries, 108-9; in barns, 181

First World War: dairy industry, influence on, 178; 185, 186-87; influence on dairy press, 183, 184-86, 192-93; and international trade, 183-84; seen as opportunity for profit, 184-86; farm labor shortage, 193; tractor, 195; experience of, used as warning, 264

Fish, A. L.: added to staff of Dairy Farmer, 33

Fisk, Jim: Erie Railroad, 78

Flies: editors campaign against, 119, 197

Florida: dairy journals founded in, 227

Florida Cattleman and Livestock Journal: begun, 227

Fluid milk: dishonest retailers, 155-56; distribution by truck, 161; distribution problems, 168, 180, 188-89, 217-18, 228, 244-

- Fluid milk (cont.):
 45; to replace liquor, 179; promotion of, 208, 257; pasteurization related to sales of, 220; tank trucks, 239; paper milk cartons, 244-45; surplus, 256. See also Milk
- Food and Drug Administration, 263
- Ford, Henry: wage policy, 193
- Foreign cheese: instructions for making, 126, 145
- Foreign news: as presented in dairy press, 18, 102, 182, 348-49
- Foreign trade: editorial reactions, 18, 102, 183, 212-13, 263-64; free trade, 49. See also Tariff
- 4-H Club: editors comment on, 216, 247. See also Youth page
- France: home of oleo, 48; silo originated in, 52
- Franklin Register, 51
- Fraud: oleomargarine as, 52-53, 89, 121, 147, 198, 261, 263; and evaporated milk, 99-100, 214; connected with merchants, 109; filled cheese as, 121; charged with, Minneapolis Board of Trade, 125; and Grout Bill, 147; centralizers charged with, 167; reasons for regulation, 189; Babcock test, cheating, 191; cooking fats as, 214; filled milk as, 214. See also Adulteration, food; Cooking fats; Filled cheese; Filled milk; Oleomargarine, history of
- Freedom of the Press: discussed by dairy editors, 172-73, 180-81
- Free enterprise: editors favor, 232, 254; under pressure, 255. See also Economic theory
- French, N. E., of Western Reserve Farmer and Dairyman, 25-26
- Frozen foods: mention, Birdseye, 237; editors comment on, 258; connection with ice cream suggested, 267, 295. See also Ice cream
- Fuller, E. Chubb, of Practical Dairyman and Agriculturist, 94
- Fuller, Lancy: connected with Columbian Exposition, 99; editor, Jersey Advocate and Dairyman, 134; policies as editor, 135; on Darwinism, 136; on Babcock test, 136; single-purpose cattle, 148; writer for Holstein-Friesian Register, 283; choice of verse, sample, 341
- Funk, Casimir: vitamins, 198
- Futures. See Marketing advice
- GABRILSON, C. L.: dairy paper contributor, 73; ideas of, 326
- Galpin, C. J., 248
- Gasoline engine: stationary, in creameries, 161; use of, urged by editors, 194; mentioned, 349
- Gasoline rationing: influence on dairy industry, 268
- General Federation of Women's Clubs: on oleo, 261
- General-purpose cattle: favored by farmers and editors, 15; advocated, 126-27; opposed, 171. See also Dual-purpose cattle
- Genesee Farmer: on breeds and breeding, 15; on state aid, 20
- Genetics: editors comment on, 148, 200, 240-41
- Georgia: dairy journals founded in, 203, 336
- Germans: atrocity stories of, editorial reaction, 184-85; mentioned, 186
- Germs. See Bacteria
- Gladstone, William E., 104
- Glover, A. J.: federal regulation of railroads, 210; marketing, 210; railroad rates, 214; cow testing, 218; tuberculosis eradication, 219, 241, 280; farm depression, 233; oleo tax, 236; cooperation, 239-40; Bang's disease, 242; editor, Hoard's Dairyman, 279; mentioned, 254
- Goats: general discussion, 172, 353; press for, 172; milk, in ice cream, 225; cream of, 237
- Goat World: begun, 177
- Goffart, Auguste: on ensilage, 52
- Gordon, F. G. R.: government ownership of railways, 338
- Gordon, W. A.: of Dairy Record, 116; on government, 229; oleo tax, 236; on A.M.A., 236; on OPA, 254; Brannan Plan, 255; price of ice cream, 259; cream collection,

- 268; biography, 289, 291, 382; on life of Dairy Record, 293
- Goss, C. A., of Dairy Farmer, 286
- Gould, Jay: Erie Railroad, 78
- Gould, John, 73
- Government aid: editors ask for, in dairying, 163, 211, 229, 256; for slaughtered cattle, 163; praised sometimes, 186-87; editors opposed to, 206, 211, 229; general editorial reaction, 211-12, 272. See also Federal aid; State aid to agriculture
- Government regulation. See Federal regulation; State laws
- Grades: cattle, crosses less than purebred, 45; no longer recommended, 170; editors comment on, 223
- Grangers: programs of, 76; mentioned, 116, 131
- Grant, General Ulysses S., 131
- Grasshoppers: in thirties, 368
- Grassland farming: editors comment on, 239-40; mentioned, 265
- Greeley, Horace, of New York Tribune, 299
- Greenbackers, 76-77
- Grout Bill: federal oleo tax pressed for, 122; becomes law, 1902, 146; provisions, 146; editors comment on, 146-47; tested in courts, 147; oleo makers seek repeal, 164, 199; ineffectiveness of, 164, 175; editors keep it on the books, 198; repealed, 262; mentioned, 150, 235. See also Oleomargarine, laws against
- Guénon, François: theory of, 46; biography printed, 47; theory disproven, 223
- Guernsey, Isle of: news from, 68
- Guernsey Breeder and Milk Journal: history of, 57; mentioned, 74
- Guernsey breeders: have paper, 57; try to reach public, 61; enter test at Chicago, 100; new paper for, 178. See also Cattle breeding
- Guernsey Breeders' Journal (Peterboro, N.H.): history of, 178; Columbian Exposition, 200; on history of cattle, 218; Mendelian genetics, 240; advertising, 240; on children, 266
- Guernsey Breeders' Journal (West Chester, Pa.): history of, 57-58, 68, 178; butter coloring, 59-60; oleo, 59-60, 60-61; overfeeding, 65; importance of city, 67
- Guernsey Breeders' Sale List and Bulletin: history of, 158
- Guernsey cattle: at Chicago Fair, 101
- HAND, Thomas J.: of Monthly Bulletin of the American Jersey Cattle Club, 45; mentioned, 47
- "Hand outs." See Information, source of; News release; Publicity
- Hardin, L. S.: opposes theory of Guénon, 46; founds New Dairy, 326
- Hard work: praised by editors, 178, 206, 253
- Harmon, E. M.: on farm electricity, 223-24; of Dairy Farmer, 286
- Harvey, Thomas, 61
- Hastings, E. M.: of Holstein-Friesian World, 134, 135, 287; of Black and White Record, 287
- Haugen, Gilbert N.: butter in price support bill, 205. See also McNary-Haugen Bill; Price supports
- Hawson, Henry: of Live Stock and Dairy Review, 138; on cleanliness, 139
- Hazard, Willis P.: of Guernsey Breeders' Journal, 57; sex determination, 61; on correspondence, unsigned, 65; influences of city on dairying, 67; importance as editor, 68
- Hearst chain of newspapers, 299
- Heatwole's Dairy Paper: history of, 152; compared, Brownell's Dairy Farmer, 156; favors co-operatives, 167; hogs, dairy complex, 169; shelter for cattle, 172
- Heinemann, Henry, of Milk Plant Monthly, 294
- Heller, Mathias, 170
- Henry, William A., contributor, 73
- Hepburn Act, 174-75
- Herd improvement. See Cattle breeding; Cow testing
- Herd Register and Breeder's Journal: history of, 49, 94, 322

Herd Register (Peterboro, N.H.):
history of, 49

Heredity. See Cattle breeding;
Genetics

Hereford cattle: defended as dairy
breed, 15

Hill, James J.: to develop a dual-
purpose cow, 200

History: of dairying, in Dairy
Messenger, 75; of dairy journals,
75-76; records saved by editors,
79; of dairying, carried by jour-
nals, 81, 248; of foreign cheeses,
145, 248; of various breeds, 200;
editors comment on, 218, 251; of
various revolutions, 229

Hoard, William D.: Jefferson
County Union, 57; begins Hoard's
Dairyman, 57; railroad refriger-
ation, 58; favors artificial butter
coloring, 60; favors anti oleo
laws, 60, 146-47; single-purpose
cattle, 62, 82, 126-27; Short-
horns, comments on, 63; on feed-
ing, 64, 84; farmers, approach to,
66; city, danger of, 67; kindness
to cattle, 68; on technical ad-
vances, 70, 88, 90, 122, 194;
farm depression, 77; dairy jour-
nals, comments on, 80, 101, 276;
favors Babcock test, 88; on oleo,
unfair, 90; no overproduction
seen, 91-92; emulated, 94-95;
favors tuberculin test, 120; tuber-
culosis eradication program,
120; sterilization, milk bottles,
122; Spanish-American War, 130;
beginners, 137; St. Louis
World's Fair, 150; Jersey Cattle,
150, 328; rural education, 160;
circulation, farm press, 161;
farm separator, 167; on barn
construction, 171-72; on First
World War, 185; vitamins, 198-
99; spread of bovine tuberculosis,
201; biography, 279, 382; com-
pared, other editors, 285, 286,
297, 299; mentioned, 106, 195,
277

Hoard's Dairyman: origin of, 6,
51; history of, 57, 58, 76, 204,
239, 279-83; circulation figures,
57, 250, 279, 280, 379; on cheese
factories, 59; on cattle testing,
80, 99, 218, 270; feeding, 64, 221;

contents and approach of, 68, 81,
136-37, 280-83; on Jersey Bul-
letin, 87, 276; Babcock test, 87,
99; Columbian Exposition, 101;
wants more cleanliness, 119;
Spanish-American War, 130-31;
First World War, 185; automo-
biles for farmers, 192; milking
machine, 194-95; vitamins, dis-
covery of, 198; bovine tubercu-
losis, eradication of, 201, 219,
241; economic ideas in, 209, 212,
214, 230, 233, 254; Woman's
Page, 216; 4-H Club, 216, 247;
kindness to cattle, 221-22; on
revolutions, 229; political views,
229, 254, 262; milk strikes, 233;
on oleo, 236, 263, 270; veterinary
medicine, 241, 242; genetics,
241; Bang's disease, 242; modern
women, 246-47; urban vs. rural
life, 248; Chicago Fair, 249;
F. D. Roosevelt, 250-51; handling
bulls, 265; artificial insemina-
tion, 267; Korean War, 272; Ex-
periment Station Bulletins, 281-
82; mentioned, 79, 129, 136, 138,
146, 152, 182, 237, 286. See also
Hoard, W. D.

Holcomb, Irving, 20

Holderness: cattle breed, 13

Holstein cattle: as dairy cattle,
82; as dual-purpose cattle, 106;
and the island breeds, 200; in
Texas, 240; breeders, dissensi-
ons between, 329; mentioned,
264. See also Cattle breeding

Holstein-Friesian Association:
battle of breeds, 100

Holstein-Friesian Register: his-
tory of, 74, 136, 204, 283-85,
287; comments on W. D. Hoard,
80; general-purpose cattle, 82;
public cattle tests, 83; Babcock
test, 86; Post Office Department,
180-81; wartime dairying, 185;
carbonated drinks, 207; circula-
tion figures, 284; objectives,
284-85; mentioned, 134, 288

Holstein-Friesian World: history
of, 74, 134, 284, 287-88; adver-
tising, 135, 240; verse, 135;
weakness of purebreds, 149;
cattle diseases, 149; education,
160; and Jersey cattle, 170, 266;

- freedom of the Press, 172; capitalism, 174; favors prohibition, 179; Belgian Relief, 184; roads for automobiles, 192; farm depression, 204; railroads, 214; drought, 235; Brown Swiss Breeders, 240; news releases, 251; milk surplus, 256; tax advice, 264; pen stabling, 265; artificial insemination, 266; mentioned, 133
- Home. *See* Farm home
- Home cheesemaking: revived in depression, 224-25
- Homogenizing: editors comment on, 355
- Hoof-and-mouth: laws on, editors comment, 182, 201, 219, 359; mentioned, 186
- Hooper, J. J.: disproves theories of Guénon, 223
- Hormones, 245
- Houghton, Frederick L.: on public cattle tests, 84; wartime dairy profits, 185; bovine tuberculosis, 201; biography of, 283, 382; compared, Jenkins, 284-85; mentioned, 266. *See also* Holstein-Friesian Register
- Howell, Amzi, of Milk Reporter, 71
- Huey, Harry W., of Ice Cream Trade Journal, 294
- Hughes, C. L., of Live Stock and Dairy Journal, 342
- Hugo, Victor: death noted, 68
- Hult, Milton: scientists as milk promoters, 257
- Humane treatment. *See* Cattle, care of
- Human interest: columns for, in journals, 219; journals carry items of, 246, 250, 289-90
- ICE cream: cone, introduced, 150; reaction of press to, 197, 225; related to butter production, 197, 258; push carts, complaints, 197; butterfat standards, 197; history of, 218, 248; goat's milk, 225; trouble with retailers, 238, 258, 295; cold storage lockers, 244, 258
- Ice Cream Field: begun, 203
- Ice cream manufacture: editors comment on, 179-80, 197, 225; brewery competition, 179; advertising, 207; frozen foods, 258; troubles of manufacturers, 259; oleo legislation, 262
- Ice Cream Review: history of, 177, 297
- Ice Cream Trade Journal: history of, 142, 293-96; on prosperity, 179; on prohibition, 179-80; wartime profits, 185; on price supports, 186-87; automobile, 192; bacteria in ice cream, 197, 245; on promotion, 207-8, 238, 258; New Deal, 232; retailers, 237, 238, 258, 259; cold storage lockers, 244, 267; higher quality needed, 258; labor, wages, 258, 270; on Dairy Queen, 260; oleo laws, 261-62; frozen food, 267; Korean War, 271; objectives and policies, 294-95; circulation figures, 295; mentioned, 133, 225
- Illinois: dairy journals founded in, 72, 95, 96, 115, 177, 203, 347
- Indiana: dairy journals founded in, 56, 74, 94, 177
- Industrial revolution: influence on dairying, 67
- Infantile paralysis, 197
- Information: shortage of, for press, 10, 11, 30, 31-32, 37, 104; difficulty securing, for press, 35; none scientific, 37; mixed with editorials, 58; farmers want, 66; scientific, 66; range of, in journals, 81-82, 124, 218, 246, 282; on conventions, 85; of local interest, 192; technical, 195. *See also* News release; Subject matter
- Information, source of: from farmers, 10, 15, 18, 30, 35, 65, 66; colleges, 11; scientists, 20, 21-22; for Dairyman's Record, 27-29; farmer's club, 31; experiment station, 64; borrowing as a, 129; news releases, 251, 265; general discussion, 251-52, 300; for Hoard's Dairyman, 281; for Holstein-Friesian Register, 283. *See also* Borrowing; Correspondents; News release

- Ingersoll, George, of Chicago Produce, 95
- Insemination. See Artificial insemination
- Inspection: cheese factory inspection urged, 141, 162; of creameries, urged, 162, 189-90; of farms, 162, 189-90. See also Cleanliness
- Inspirational material: virtues of farming and dairying, 34, 67; for improving the industry, 79, 227; types of, 103-4, 217, 248, 252-53; Second World War, source of, 252
- Internal Revenue, Bureau of, 236
- International Confectioner: Cutler, T. D., editor of, 294
- Interpublication disputes: general discussion, 78-81, 127-30; end of in some cases, 206; on price supports, 230, 254; breed journals end, 240, 266; on Bang's disease, 242; Jenkins vs. Houghton, 284-85; Kimball in on, 290. See also Conflicts
- Interstate Commerce Act, 174
- Inter-State Milk Producers Review: begun, 203
- Iowa: dairy journals founded in, 50, 70-75, 96, 136, 177, 203, 321; as dairy state, 50; creamery fires, 108
- Iowa Dairy and Marketing News: begun, 177
- Iowa Farmer and Breeder, 332
- Israel, A. R., of Nebraska Dairyman and Up-To-Date Farmer, 115
- JAPAN: as butter market, 126; mentioned, 246
- Jefferson County Union: forerunner, Hoard's Dairyman, 57, 279; on silos, 69
- Jelke's Good Luck Oleomargarine: stamp, A.M.A., 236
- Jenkins, Dennis H.: founds, edits Jersey Bulletin, 56; on oleo, ideas and programs, 59, 60, 89; opposes artificial butter color, 59, 128-29, 136; single-purpose cattle, 62, 106; on Ayrshire cattle, 62; editorial objects and policy, 65; on cattle industry, 66; marketing, 67; on technical improvements, 70, 86, 91; history, Jersey Bulletin, 79; and W. D. Hoard, 80, 101, 280; against Babcock test, 86, 99, 126; attacks S. M. Babcock, 86-87; critical of separator, 91; and Columbian Exposition, 97, 100-101; pro-Jersey, 106; on tuberculin test, 120; tuberculosis eradication by slaughter, 120; disputes surrounding, 128-29; St. Louis Fair, 149; and T. O. Thompson, 149-50; biography of, 274-75; compared with F. L. Houghton, 284-85; personal journalism, 299; mentioned, 134, 147, 266, 285, 297, 329, 382
- Jensen, W. F., of Jensen's Dairyman, 113
- Jensen's Dairyman: history of, 113; reflects prosperity, 126
- Jersey Advocate and Dairyman: history of, 134, 135; verse in, 135; butter and cheese coloring, 136; mentioned, 133, 283, 347
- Jersey breeders: have paper, 56-57; to profit if coloring prohibited, 59; advance virtues of Jerseys, 82; enter test, Columbian Exposition, 84, 100; criticized, Columbian Exposition, 98; and Jersey Advocate and Dairyman, 134; ridiculed, 170; publicity motion picture, 200; and pasteurization laws, 220-21. See also Breeders, cattle; Cattle breeding
- Jersey Bulletin: early history of, 56-57; circulation of, 57, 250, 276; on oleo, 59; artificial butter color, 59, 183; feeding, 64; contents of, in general, 68, 76, 81, 276-79; and Hoard's Dairyman, 80, 101, 283; on Babcock test, 87-88, 126; farm butter, 88; milking machine, 90; Columbian Exposition, 97, 200; Jersey Advocate and Dairyman, 134, 136; St. Louis World's Fair, 149; Post Office trouble, 180; advertising, 180-81, 240, 275-76; on politics, 181-82, 231; wartime profits for dairying, 185; farm labor, 193; motion picture promotion, 200; stock market, 1929,

- 206; condensed milk, 206; boy and girl calf club, 216; pasteurization laws, 220; electric fences, 239; sulfanilamide, 241; brucellosis, 242, 271; science, reaction to, 245-46; Borden cows, 246; Spanish Civil War, 248; press releases, 251; war inconvenience, 252-53; Jersey Creamline milk, 257; promotion, dairy products, 257; artificial insemination, 266; Youth Page, 266; history of, 274-79; mentioned, 83, 91, 106, 192, 283, 284, 285
- Jersey cattle: virtues of, 62; owned, careful dairymen, 88; at Columbian Exposition, 99, 101; St. Louis World's Fair, 149; demand in Guatemala, 182; fate, First World War, 184; adaptable to South, 192; kept, Franciscan monastery, 200; versatility and adaptability, 266, 376; mentioned, 45
- Jones, R. G., of National Butter and Cheese Journal, 382
- Jones, Robert E.: of Pacific Dairy Review, 116; interested in history, 248; dairy public relations, 263; Korean War, 271
- Jones, S. A., of Dairy Age, 114
- Joslin, A. C.: on importance of pasteurization, 355
- Journal of Dairy Science: begun, 177
- Journals. See Agricultural journals; Breed journals; Dairy farm journals; Trade journals
- KANSAS: dairy journals founded in, 113-14, 203; status of dairying in, 113, 335-36
- Kansas Dairy Farmer: history of, 114; favors dairy cattle, 127
- Kansas Dairyman: history of, 113; Jensen's Dairyman, 114; Spanish-American War, 130
- Kerschensteiner, M. J., of Hoard's Dairyman, 379
- Ketosis: use of cortisone in, 270
- Kimball, Fred L.: founder and editor, Creamery Journal, 72, 288; biographical notes, 72, 137, 285-86, 289, 290, 382; boosts obscure journals, 79; on American Creamery, 80; on Columbian Exposition, 98; creamery fires, 108; political views, 117, 131; on C. Y. Knight, 117; creamery construction, 123; farm separator, 123; commission merchants, 125; on Creamery Gazette, 130; founds Kimball's Dairy Farmer, 136
- Kimball, H. M., of St. Paul Dairy Reporter, 112
- Kimball's Dairy Farmer: absorbs Dairy and Creamery, 115, 137; absorbs Dairy Gazette, 115, 137; Hoard's Dairyman, 136; history of, 136-37, 285-87, 341; editorial policies, 136-37, 286-87; influence on other journals, 137; on Grout Bill, 147; dairy specialization, 169; column, "The Hog," 169; advanced registry, 170-71; favors single-purpose cattle, 171; column, "The Silo," 172; farm tenantry, 173; verse, Hepburn Act, 174-75; Panic of 1907, 175; preparedness, 184-85; federal aid, hoof-and-mouth, 186; antifreeze for cars, 192; circulation figures, 380; mentioned, 133, 138, 152. See also Dairy Farmer (Des Moines, Iowa)
- Kimber, John B., of Milk Reporter, 71
- Kindness to animals. See Cattle, care of
- Knight, Charles Y.: of Chicago Produce, 95; relates depression to oleo, 105; Babcock test, 107-8; railroad rates, 110; politics, 117; butter and oleo, 143; on cleanliness, 145; lobbied, Grout Bill, 146-47; notes, oleo consumption up, 147
- Knox, William D.: editor, Hoard's Dairyman, 262, 279; wants oleo tax kept, 262; fraudulent oleo sales, 263; brucellosis, 280
- Koch, Robert: work on tuberculosis, 91; tuberculin test, 91; dairy journalists defy, 163; bovine not same as human tuberculosis, 163; mentioned, 241
- Korean War: editorial comments on, 271-72, 377

- LABOR problems: Homestead Strike, 81; editorial attitudes, 104-5, 192-94, 215-16, 233-34, 269-70; higher pay for dairy workers, 125, 215-16, 233, 234; unions, 192-94, 215, 216, 233, 234, 255, 269, 270; laws affecting, 193; women in creameries, 194; strikes, 232-33; wages, prices related, 258; labor shortage, dairy, 269-70; unions support repeal of oleo tax, 270; mentioned, 142, 167, 173. See also Draft; Farm labor
- Lactic sugar: importance noted by press, 90, 145
- Land O'Lakes Creameries. See Minnesota Coöperative Creameries Association
- Land O'Lakes News: begun, 203
- Land values: rises in, 179, 264
- Lard: editors relate to oleo, 213, 236
- Lard cheese. See Filled cheese
- League of Nations, 182-83
- Legislation: editors find it useful, 175; oleo, 236; for quality in dairy products, 243. See also Oleomargarine; Public health
- Lehman, Herbert, 263
- L'Elvezia: on dairying, history of, 325-26
- Lend-Lease, 232
- Lever Bill, 198
- Lewis, John L.: attempts to organize dairy farmers, 254, 269
- Liebig, Justus von: work copied, 10
- Lillie, C. C., 161
- Limburger: history of, in press, 145
- Lincoln, Abraham, 103, 131
- Literary quality: efforts to improve, 133-35; in dairy journals, 159; in Holstein-Friesian World, 288
- Live Stock and Dairy Journal: history of, 138-39; on stock and farm problems, 140; favors purebreds, 170; first Woman's Page, 216; mentioned, 133
- Lobbying: antioleo laws, 146-47; oleo manufacturers want repeal, 164; editors function well as lobbyists, 166
- Localism: in new dairy papers, 123
- Loomis, A. M., 235
- Louisiana: dairy journal founded in, 203
- Lounsbury, L. A., of Guernsey Breeders' Journal, 178
- Love and the Jersey, motion picture, 200
- Lowell, James R.: quoted, 135
- Loyalty. See Politics
- Luther, A. K.: favors Holsteins, 82
- Lyceum: like farmers' institutes, 161; importance of, 299. See also Education
- McADAMS, James, 88
- McCullum, E. V.: discovers vitamins A and B, 198; mentioned, 199, 213. See also Vitamins
- McConnell, W. W. P., of Western Farmer and Dairyman, 137
- McCracken, Burton, of North-western Creamery Journal, 112-13
- McFarland, R. D., of Live Stock and Dairy Journal, 342
- Machinery, dairy: churn, animal powered, 6; at Columbian Exposition, 97, 98; farm, comments by Hoard, 194; editors urge use of more, 194, 239-40; gasoline to replace steam, 194; shortage, 195, 271-72; maintenance, 267
- McInerney, Ruth, 249
- McKee, R. S., of Dairy Journal, 75
- McKinley, William: charged with tampering with economic law, 103; assassination of, 131
- McKinley tariff: and depression, 103
- McLain, N. W., of Dairy and Creamery, 115
- McNary-Haugen Bill: trade and technical editors oppose, 204-5; 212. See also Price supports
- McNutt, Paul V.: editors comment on, 237, 260
- MacVean, J. M.: of Milk News, 96; on unfair competition, 168; on progress, 178
- Madrigan, E., of Creamery and Dairy, 72

- Maine Board of Agriculture:
quoted, 246
- Manila: Battle of, 131
- Manufacturing: dairy products,
press accounts, 22, 59, 157, 224,
243, 267-68; cleanliness empha-
sized in, 145, 224; advice on, in
columns, 243; automation of,
butter, 267
- Manure: save and use, 29, 30
- Marketing advice: given, 18, 38,
67, 68, 92, 190-91, 206, 237,
289, 292, 297; problems dis-
cussed, 67, 143, 168-69, 191,
208, 210, 237, 238, 254-55; quo-
tations and reports, 72, 117, 186;
mentioned, 71, 90, 167, 204. See
also Distribution; Economic
theory; Retailers
- Market mechanism. See Economic
theory
- Marshall, Robert, of Dairy
Farmer, 50
- Marshall Plan: editors cautiously
endorse, 263
- Marty, Carl: of German section,
Cheese and Dairy Journal, 141
- Maryland: dairy journals founded
in, 177
- Mason, Walt: of Nebraska Dairy-
man and Up-To-Date Farmer,
114-15; mentioned, poem, 365
- Mason and Faught: publishers,
Kansas Dairyman, 113
- Massachusetts: dairy journals
founded in, 177
- Massachusetts Society for the
Promotion of Agriculture, 18
- Master Steam Fitter, 294
- Mastitis: treatment of, 241;
trouble using penicillin, 270
See also Veterinary medi-
cine
- Masurovsky, B. I., of Ice Cream
Trade Journal, 294
- Maxon, J., of Dairy and Farm
Journal, 50
- Meat packers, 48, 89. See also
Oleomargarine
- Melick, C. W., 169
- Mendel, Gregor: influence on
dairying, 41; theories presented
by Press, 58, 240-41; mentioned,
21
- Merchandising. See Advertising;
- Marketing advice; Promotion of
dairy foods
- Merchant marine: editors protest
subsidy, 211, 343
- Meredith, E. T.: of Dairy Farmer,
126, 286; mentioned, 216
- Metropolis: importance of, dairy-
ing, 73, 111, 151. See also Cities,
markets of
- Metropolitan Life Insurance Com-
pany: gives milk free adver-
tising, 208
- Meyer, E. C., of Hoard's Dairy-
man, 379
- Michels, John, of National Butter
and Cheese Journal, 382
- Michigan: dairy journals founded
in, 71, 156, 203
- Michigan Dairy Farmer: history
of, 156-57; on prohibition, 174;
comfortable farm life, 181;
shortage of farm labor, 193;
Ford wage policy, 193. See also
Brownell's Dairy Farmer
- Michigan Dairyman. See Amer-
ican Cheesemaker
- Michigan Milk Messenger: found-
ing, 203
- Microbiology: used against oleo,
52. See also Bacteriology
- Middleman: produce merchants,
43; dairy produce, 44, 78; farm-
ers dislike, 75, 78; journals for,
95; defended, 125; price sup-
ports, 204. See also Conflicts;
Dairy journals
- Migration: rural to urban, 193
- Miles, Manly: American silo, 52
- Milk: care of, 18, 25, 119; mar-
keting, 116, 207; bitterness in,
122; tubercular infected, 163.
See also Bacteria; Cleanliness;
Fluid milk
- Milk Dealer: historical notes, 177,
297
- Milk fever: cause, cure, 148. See
also Veterinary medicine
- Milk Goat News: begun, 203
- Milking: instructions on, 54, 145
- Milking machine: influence on
cleanliness, 54; editors com-
ment on, 90-91, 162, 194-95;
importance, advertising, 162;
farm labor shortage, 195. See
also Machinery, dairy

- Milking Shorthorn Journal: founded, 203
- Milk Inspector: begun, 227
- Milk Magazine: begun, 177
- Milk Man: history of, 153-54
- Milk News: history of, 96, 204; on the depression, 103; scrub cows, 107; organization of milk shippers, 109; on Tennyson, 159; big milk distributors, 168, 188; cost of living, 175; progress, 178; comfortable farm living, 181; Election, 1912, 182, 183; Canadian Reciprocity, 183; dairy trust, 188
- Milk Plant Monthly: begun, 177, 294
- Milk Producer: begun, 347
- Milk Producers Review: begun, 203
- Milk Reporter: history of, 71, 73, 204; on land values, 179; League of Nations, 182-83; on tariff, 183; British import laws, 183-84; wartime dairy profits, 185; Fourth Liberty Loan, 185-86; milk route consolidation, 188; urban health laws, 189, 189-90; canned cheese, 191; milking machine, 194; condensed milk, 206; pasteurization, 220
- Milk sickness, 21
- Milk solids: federal aid for, 256
- Milk strikes: reveal depression, 205; editors comment on, 215-16, 232; labor union assistance, 216; collective bargaining, 232
- Mill, John Stuart: quoted, 189
- Miller, G. B., of Western Reserve Farmer and Dairyman, 25
- Minneapolis Board of Trade: charged with fraud, 125
- Minnesota: dairy journals founded in, 112, 115, 137, 152, 177, 203, 227
- Minnesota Butter and Cheese Makers' Association: part owner, Dairy Record, 115, 291
- Minnesota Coöperative Creameries Association: proves value of advertising, 207
- Minnesota Dairy and Food Department, 190
- Minnesota Dairyman: change from Heatwole's Dairy Paper, 152; on fraudulent sale, oleo, 198; J. J. Hill, dual-purpose cattle, 200
- Mississippi: cottonseed oil, 237; dairy journal founded in, 335
- Missouri: dairy journals founded in, 76, 153, 203, 227, 347
- Missouri Dairyman: begun, 347
- Modern Dairyman: begun, 227
- Moebus, W. H., of Pacific Dairy Review, 116
- Mohawk Courier: and Dairyman's Record, 26, 51; severed, Dairy Farmer, 31; supplants Dairy Farmer, 40; mentioned, 6
- Mohawk Valley: early dairying region, 26
- Mold. See Butter; Buttermaking
- Monopoly: charged, 72; in dairy industry, 72, 144, 188; in agricultural commodities, 78; centralizers, associated with, 143-44, 188; mentioned, 75. See also Trusts
- Monrad, J. H.: founder and editor, Dairy Column, 73; boiler plate, 74; founds and edits Dairy Messenger, 75; interested in history, 75-76; urges dairymen to read journals, 79; evaporated milk frauds, 99-100; foreign news, 102; generators, electric, 161; Hoard's Dairyman, 279; Creamery Journal, 289; ice, cooling butter, 335; mentioned, 290
- Monthly Bulletin of the American Jersey Cattle Club: history of, 45-49, 275; shortage, advertisers, 47; subscribers, 47; supports theory of Guénon, 49; silo, 52; cleanliness, 54
- Monthly Journal of Agriculture: begun, 16
- Moore, J. G., of National Butter and Cheese Journal, 382
- Moratorium: for banks, editors approve, 231
- Morgan, James, of Dairy and Farm Journal, 50
- Morrill Act: importance of, 41
- Morrison, C. E., of Blooded Stock, 94
- Motion pictures: as Jersey promotion, 200; mentioned, 246
- Motor vehicles. See Automobile; Transportation

Muckraking: in dairy press, 142.

See also Economic theory;
Politics

Munn, M. D.: president, National Dairy Council, 363

Murray, Reid, 270

Musser, Karl B., of Guernsey Breeders' Journal, 178

Myrick, Norman: suggests end of antioleo laws, 262; tariff on butter, 264; managerial editor, 299

NATIONAL Butter and Cheese

Journal: history of, 177-78, 296, 382-83; comments, federal laws, 231; oleo tax, 236-37; cheesemaking, 243; patriotism, 252; butter trade, 254-55, 258; farm price supports, 256; industry advertising, 257; butter and cheese retailers, 258; creameries shift to cheese, 259-60; oleo sales, 261; cream improvement, 267; dirt, dairy products, 268; consolidation, cream routes, 268; mentioned, 265, 293. See also Butter,

Cheese and Egg Journal

National Butter Journal: history of, 296; mentioned, 178

National Cheese Journal: history of, 296; mentioned, 178

National Dairy Council: part of presidential address, 363; mentioned, 262

National Dairyman: history of, 76; comments, Creamery Journal, 80; Homestead strike, 81; favors creamery, 88; antioleo, 90, 110; charges corruption, Columbian Exposition, 101; help for a cripple, 104; average dairy cow, 106-7; drought-resistant feeds, 107; tuberculosis eradication, 110

National Dairyman News: history of, 326

National Dairy Union: E. K. Slater, secretary, 297

National Poultry, Butter and Egg Association: gets government help, 211

National Poultry, Butter and Egg Bulletin: begun, 177

National Recovery Act: editors

accept as necessary, 231

Native cattle: favored by farmers, 15-16; called scrub, 45; editors seek to eliminate, 58, 82, 106.

See also Cattle breeding; Scrub Natural selection: runs counter to human selection, 54. See also Darwin, Charles; Evolution

Neale, A. S., of the Dairy Bulletin, 155

Nebraska: dairy journals founded in, 73, 114, 342

Nebraska Dairyman and Up-To-

Date Farmer: history of, 114-15; bovine tuberculosis, 120; milk fever, 148; uneducated farmers, 160; opposed, cooperative creameries, 166; feels trusts are persecuted, 174

Nelson, Admiral Horatio, 131

New Dairy: mentioned in Creamery Journal, 79; favors Babcock test, 86; history of, 326

New Deal: editorial reaction to, 231, 232

New England Dairyman (Boston): founding, 177

New England Dairyman (Poultney, Vt.): history of, 43

New England Farmer: first published, 12; on cattle breeding, 13; on cleanliness, 13; change of editors, 15; cheese poisoning, 18

New Hampshire: begins aid to agricultural societies, 9; dairy journals founded in, 49, 54, 57, 158, 178

New Idea Woman's Magazine: quoted, verse, 159

New Jersey: dairy journals published in, 71, 94, 227

News: local, carried by dairy press, 191-92. See also Foreign news; Information, source of

News and Dairyman: history of, 93; mentioned, 94

Newspapers: country editors as dairy editors, 6, 51; corruption charged, 180; rural and oleo, 199; urban and oleo, 262-63

Newsprint, shortage of: 156-57

News release: source of information, 249, 251-52, 265. See also Information, source of

New York: dairy journals founded in, 44, 71, 79, 94, 95, 134, 142, 177, 203, 227, 326

New York Butter Trade: consolidated, American Creamery, 72

New York Daily News, 294

New York Evening Mail, 294

New York Herald, 299

New York Produce Review: history of, 95-96; on returning prosperity, 125; on immigration, 131; purebred dairy cattle, 148; electric generators, 161; centralizer vs. coöperatives, 167; favors silo, 172; Election, 1912, 182; foreign trade, 183, 212; First World War, 185; ice cream, 197; opposes McNary-Haugen, 204-5; farm relief, 205; promotion, dairy foods, 207; government aid, 211; centralizer, 214; human interest, 219; pasteurization laws, 221; mentioned, 117, 130

New York Produce Review and American Creamery. See New York Produce Review

New York State Dairymen's Association, 320

New York World's Fair, 1940, 248-49, 278

Northern Ohio Milk Producers Association: publishers, Dairy Bulletin, 155

Northwest Dairyman. See Minnesota Dairyman

Northwest Dairyman and Farmer: use of tractor, 195; dairying in depression, 205; praise hard work, 206; milk price fixing, 210; farmers buy oleo, 213; begins Woman's Page, 216; liberal education, farm youth, 216-17; influences tuberculosis testing, 220; mentioned, 239, 246

Northwest Dairyman and Horticulturist. See Northwest Dairyman and Farmer

Northwest Horticulturist, Agriculturist, and Dairyman: history of, 95

Northwestern Creamery Journal: history of, 112-13

Northwestern Dairy and Farm

Produce: absorbed by St. Paul Dairy Reporter, 112

Northwestern Dairyman: history of, 154-55; procentralizer, 154-55, 166, 167; wants milking Shorthorns, 171

Northwestern Farmer and Dairyman: history of, 50

Northwestern Shippers' Association, 190

Nutrition: investigation of, 118; value of butter, 165, 166; butter vs. oleo, 189, 199

OFFICE of Price Stabilization, 254

Ohio: factory production of cheese, 19; dairy journals founded in, 155, 177, 203

Ohio Cultivator: begun, 19; factory production of cheese, 19; milk chemical content, 21

Oleomargarine: history of, 48, 52; microbes in, 48; associated with lard and packing houses, 52, 89, 198; efforts to sell as butter, 60, 89, 147, 198, 263; sale and promotion, techniques, 89, 110, 165, 199, 236; general discussion of, 89-90, 146-47, 260-62; Columbian Exposition, 101; Russian laws on, 102; depression and sale increases, 105, 213; organized labor and, 105; sales, amount, 110, 236, 261; related to process butter, 122, 214; farmers use, 164; influence on dairy quality, 169; and vitamins, 198, 199, 213, 237; vegetable fats, 213, 230; legal victories of, 236, 237; Dairy Queen, 260; Korean War, 272; mentioned, 143, 288, 297. See also Cooking fats

Oleomargarine, editorial comment: disapprove use or manufacture, 48, 52, 60-61, 89, 122, 165, 235; general reaction of press, 52-53, 105-6, 143, 146-47, 164, 166, 197-99, 213-14, 235-37, 260-62, 277, 280, 287, 289; and artificial color, 59, 164; claimed unhealthy, 60, 89-90, 165-66; competition, butter, 168; and laws, 198, 261, 262

- Oleomargarine, laws against:
 urged by press, 60-61, 117,
 122, 146, 261; state and local,
 90, 122, 126; summation, 105;
 manufacturers fight, 122, 147,
 164-65, 235-36, 261; federal,
 146, 147, 166, 236; federal tax
 repealed, 262, 270, 271
- Oliphant, David: of Milk News,
 96; on the depression, 103; on
 scrub cows, 107
- Olsen, Hans Peter: of Dairy
 Record, 116, 291; publisher,
Butter, Cheese and Egg Journal,
 177; increases number of pub-
 lications, 177-78; biography of,
 296; mentioned, 293
- Olsen, Lester: cited, 382
- Olsen Publications: history of,
 296-97; significance of, 297;
 mentioned, 299
- Olsen Publishing Company. See
 Olsen Publications
- Olson, O. W., 246
- Orange juice, 237
- Oregon: dairy journals founded in,
 50, 177, 203, 322
- Oyston, Charles: of Dairyman's
 Record, 27; favors sugar beets
 over dairying, 38
- PABST Holstein Farms, 380
- Pacific Coast Dairyman: history
 of, 94-95; mentioned, 106
- Pacific Dairy Review: successful
 regional paper, 93; history of,
 115, 116, 140; butter, adultera-
 tion, 168; on First World War,
 184; expansion of dairying, 192;
 organized labor, 193-94; ice
 cream, information, 191, 225;
 on oleo, 198, 213, 262, 263;
 favors single-purpose cows, 200,
 222; feeding, 201; depression
 comments, 204; butter, use of,
 206-7, 213; promotion, dairy
 foods, 208, 238, 257; butter, 209,
 212; tariff, 212; farm vs. city
 women, 216; carries histories,
 218, 248; milkmen sell orange
 juice, 237; retailer tricks, 238;
 tank truck, fluid milk, 239; care
 of cattle, 245; human interest,
 246; urban-rural conflicts, 248;
 San Francisco World's Fair,
 249; postal rates, 251; political
 comments, 253, 254, 255; em-
 ployer-employee relations, 269;
 Korean War, 271
- Pacific Homestead: quoted, 362
- Pan-American Exposition:
 McKinley killed, 131; treatment
 by dairy press, 149
- Panic of 1837, 9
- Panic of 1873: influence on dairy-
 ing, 43; influence on farmers,
 76
- Panic of 1893, 96
- Panic of 1907: press comments
 on, 175, 352
- Paper milk containers: editorial
 discussion of, 244-45. See also
 Fluid milk
- Parcel post, 239
- Parity, 254, 255. See also Price
 supports
- Parks, J. S., of Dairy Age, 114
- Parks, K. W., of Dairy Age, 114
- Parks, Malcolm: of Ice Cream
 Trade Journal, 232, 294; on New
 Deal, 232
- Pasteur, Louis: importance, dairy
 industry, 41; mentioned, 21, 32
- Pasteurization: when unknown,
 25; editors urge use of, 108,
 122-23, 146, 220-21; not men-
 tioned much, 119; limitations of,
 138-39; required, 162, 221;
 tuberculosis, prevents spread,
 197; use of, increases, 220, 243;
 reason for, 355; mentioned, 271
- Patent Office: collects agricul-
 tural information, 10
- Paternalism: defined and disliked
 by editors, 182, 186-87. See
also Federal aid; State aid to
 agriculture
- Patriotism: outbursts of, 184-
 85, 252
- Patrons of Husbandry, 76
- Penicillin, 270, 278
- Pennsylvania: dairy journals
 founded in, 50, 57, 79, 94, 177,
 203
- Pen stabling: discussion in press,
 265. See also Cattle, care of
- Pepsin: substitute for rennet,
 354
- Pevely Dairy Company, 232

- Philadelphia Guernsey Breeders' Association: paper for members, 57
- Philippines: source of cocoanut oil, 236; editors want independence for, 236, 290; mentioned, 131
- Pickering, Timothy: on cattle breeding, 11; Shorthorns not dairy cattle, 13
- Poetry. See Verse
- Politicians: editors dislike, 229
- Politics: editors comment on, 117, 130, 181-82, 184, 229-31, 253-55; regulation, dairy industry, 182, 253; editors fear concentration of power, 229-31, 253; editors want more help, fewer bureaucrats, 253; oppose CIO-backed candidates, 270
- Popular Science Monthly, 299
- Population, growth of: influence on dairy industry, 23, 41, 122, 256; city migration, 193. See also Cities, growth of
- Populist Party: dairy press reaction, 77; mentioned, 173
- Post Office Department: regulations, freedom of Press, 173; second-class matter, 173, 277; editors have trouble, 180-81, 277; raise in rates, 251
- Powdered milk: improved, 90; regular commodity, 145, 191; mentioned, 163
- Poynton, J. G., of Hoard's Dairyman, 379
- Practical Dairyman: history of, 348
- Practical Dairyman and Agriculturist: history of, 94; tuberculosis and silage, 119; comments on Jenkins, 128-29; butter color, 128-29
- Practical Farmer: on theory of Guénon, 46
- Prairie Farmer: begun, 16; on breeding, 16; cattle, care of, 17
- Prescott, Maurice S.: of Holstein-Friesian World, 135, 287; on fluid milk surplus, 256; of Black and White Record, 287
- "Preservalline": denounced by editors, 108
- Preservatives, dairy: opposed by editors, 91, 107-8, 190; boric acid as, 146
- Press-agent: role of, dairy journalism, 249
- Price, F. T., of Holstein-Friesian World, 287
- Price control: editors demand end of, 254-55; mentioned, 232
- Price fixing: editors approve, 210
- Prices: agricultural, climb after 1845, 9; affected by competition, 9-10; low, linked dirty foods, 119; for dairy cattle, 223; rise by scarcity, 231; high, convince public of justice, 257-58
- Price supports: editors comment on, 186-88, 230, 252, 254, 255-56, 263, 272, 292, 295; related to oleo, 262; and Korean War, 272. See also Brannan Plan; Interpublication disputes
- Price wars: press discussion, 256-57
- Priorities: editors dislike, 252
- Prisons, Bureau of, 237
- Process butter: described, 121-22; disappearance of, 214. See also Buttermaking
- Processing. See Manufacturing
- Produce merchants. See Retailers
- Produce Packer: begun, 203
- Productivity, increase of: key to prosperity, 109; general, 324. See also Economic theory
- Progress: editors comment on, 178-79
- Progressive Party: editors comment on, 182
- Prohibition: dairy editors favor, 174, 179; editors have misgivings, 180, 217-18; breweries as dairy processors, 180, 217-18; political uses of, 229; mentioned, 207
- Promotion of dairy foods: editors urge, 168, 206, 207-8, 237, 257-58, 262, 290, 292; industry cooperation, 207; of special breed milk, 257; to replace lost oleo tax, 262; verse as part of, 364-65. See also Advertising
- Prosperity: of 1840's, 9; after 1898, 125-26; influence, dairy-ing, 131, 133, 179, 250; influ-

- Promotion of dairy foods (cont.):
 ence, dairy press, 136, 161, 178;
 First World War, 178; predicted,
 231; program for return of, 237;
 Second World War, 250
- Proteins: feeding, editors com-
 ment on, 172, 239
- Psychology: journals carry items
 of, 248
- Publications, governmental: edi-
 tors comment on, 186, 354
- Public health: editors concerned,
 oleo a threat to, 89-90; editors
 support laws to protect, 138,
 162, 189-90, 220-21; state and
 local laws, 162, 189-90; atti-
 tudes, farmers and distributors,
 162; verse on, 189-90. See also
 Tuberculosis
- Publicity. See Advertising; News
 release; Promotion of dairy
 foods
- Publicity handouts: source of in-
 formation, 251
- Public utility. See Distribution;
 Fluid milk
- Puerto Rico: butter tariff for,
 131
- Pump-priming: editorial reac-
 tions to, 231-32
- Purebred cattle: editors advocate
 use of, 16, 61, 148, 170-71;
 farmer attitude toward, 16, 22,
 171, 222-23; susceptible to dis-
 eases, 148-49; not always best,
 204; bulls, 222-23; general as-
 sociation, breeders, 240
- Pure Bred Cattle Association:
 begun, 240
- Pure Food laws: urged by editors,
 126; difficulty enforcing, 163.
See also Adulteration, food;
 Fraud; Public health
- Pure Milk Magazine: begun, 203
- Putnam, Allen: of New England
Farmer, 15; editorial program,
 15
- QUALITY, high, dairy foods: edi-
 tors insist on, 68, 196, 209, 243,
 267; butter, poor, 85; butter im-
 proves, 169; to be achieved by
 law, 243
- Quarantine laws: federal, editors
 comment on, 182, 201, 359
- RABUFFO, Vincent: on high-quality
 ice cream, 258; Korean War,
 influence of, 271-72; biographi-
 cal notes, 294, 382; editor, Ice
Cream Trade Journal, 294
- Radio: advertising, 238
- Railroads: importance to dairy-
 men, 8, 143, 214-15; transcon-
 tinental, 40; and canals, 49-50;
 rate laws, 76; editors criticize,
 109-10, 116, 144, 156-57, 174,
 183, 192, 214, 286, 289, 338-39;
 government ownership, 183, 338;
 praised, 214-15
- Rankin, G. W.: of Cheese and
Dairy Journal, 140; editorial
 policy, 141; prolabor, 142; on
 capitalism, 142
- Rankin, H. P., of Dairy Gazette, 115
- Rann, Howard: on oleo, 165
- Rationing: in war, editors dislike,
 252, 253-54; gasoline and tires,
 influence, dairying, 268-69
- Recession of 1937: attitude of edi-
 tors, 232
- Reciprocal trade agreements:
 Canada, 1911, editors against,
 183; editors in general against,
 230, 263-64. See also Foreign
 trade; Tariff
- Reciprocity. See Reciprocal trade
 agreements
- Reconstituted butter. See Process
 butter
- Reconstruction Finance Corpora-
 tion, 231
- Red Cross: editors support, 185
- Red Polled cattle: called dual-
 purpose cattle, 106
- Red Polled Journal: begun, 203
- Reed, Alonzo: writer, Dairymen's
Record, 27; favors Ayrshires,
 28; on cheesemaking, 36
- Reform: varieties of editorial in-
 terest, 173, 181-82. See also
 Economic theory; Politics
- Refrigeration: importance of, 24;
 railroad, 58, 338; importance of
 modern, 245
- Registry. See Advanced registry;
 Artificial insemination; Cattle
 breeding
- Rennet: how to use, 59, 225;
 shortage, wartime, 185, 354. See
also Cheesemaking

- Republican Party, 229, 230
- Retailers: editors criticize tactics of, 238, 258, 259, 278
- Review of Reviews: on W. J. Bryan, 117
- Rhode Island: dairy journal founded in, 45
- Richard III: quotation, 107
- Richards, Guy MacL.: founds Pacific Coast Dairyman, 94; on breeds and breeding, 106; favors hard work, 206; oleo, 213; prohibition, 217
- Ripening cream. See Starters
- Roads: Cumberland, 8; editors interested, improvements, 192, 215. See also Automobile
- Robber Barons. See Monopoly; Trusts
- Roberts, J. W., of Hoard's Dairyman, 379
- Rockefeller, John D., Sr.: produce merchant, 44; oil, 78; mentioned, 78
- Roosevelt, Franklin D.: death of, noted by press, 250
- Roosevelt, Theodore: editors interested in 1912 campaign, 182
- Rothe, G. H., of Pacific Dairy Review, 116
- Rubber: shortage and rationing of, influence on dairy industry, 268
- Rueben H. Donnelley Corporation: publishers, Ice Cream Trade Journal, 294
- Runion, E. T., of Dairy Journal, 75
- Rural New Yorker: condensed milk, 34
- Russell, Harry L.: on benefits of pasteurization, 108; cold curing, cheese, 145; mentioned, 282
- Russia: laws on oleo, 102; wants butter, 183, 261
- SAFETY: campaign for, 181
- St. Louis Post-Dispatch: on oleo, 198
- St. Louis World's Fair: editors comment on, 149
- St. Paul Dairy Reporter: history of, 112; depression, reaction to, 125
- St. Paul Farmer: quoted, 345
- Saltpeter: as cheese preservative, 18; purify, milk and cream, 122
- Sandholt, Henry: editor of Dairy Record, 116, 291; denounces centralizer, 166, 190-91, 196, 292; women in creameries, 194; favors cream grading, 196
- San Francisco: earthquake, 116
- San Francisco World's Fair, 1940: editorial mention, 248, 278
- Sanitary Milk Producers: milk strike, 232
- Saylor, William H.: founder and editor, Dairy and Produce Review, 116; founder, Pacific Dairy Review, 116; butter adulteration, 168; stock feed, 168; German atrocities, 184; oleo, 198; science and farm, 201; mentioned, 138
- Schilling, W. F.: editor successively of Heatwole's Dairy Paper, Minnesota Dairyman, and North-west Dairyman, 152; hogs for dairymen, 169; Grout Bill, 198
- Schlosser, Gus: poem, 366
- Science: professional beginnings, 8; and agricultural societies, 8; source of information, 20, 21, 22, 66, 85, 135-36, 243, 281; shortage of information on, 30, 32, 37, 59; State aid to, 30-31, 41; theory of Guénon, 46; in breeding, 46, 200; oleo, 52-53; feeding as, 64, 118; influence on industry, 92, 206, 245-46, 267; editors vs. scientists, 119, 163; mixed with lore, 122; general discussion, 245-46; and veterinary medicine, 270. See also Bacteriology; Evolution; Veterinary medicine
- Scientific American: quoted, 39
- Scientific journals: compared to dairy journals, 299
- Scripts-Howard chain, 299
- Scrub: name given to native cows, 45; compared to Shorthorns, 102; editors comment on, 107, 222; Darwinism as defense of, 135; hardness, 148; inferior butter, 209; mentioned, 364. See also Cattle breeding
- Seasonal advice: editors give, 265
- Second World War: viewed as

- solution to dairy depression, 237, 372; 373; editors comment on, 250, 251, 252-53, 264; postwar planning, 250; end of, change in attitude, 254-55; influence on transportation, 268
- Segis Fayne Johanna: Holstein cow, 285
- Selective Service. See Draft; Labor problems
- Selling. See Advertising; Marketing advice; Promotion of dairy foods
- Senate: critical mention, 263
- Separator: cream, centrifugal, early history of, 53; cautiously recommended, 53; adds advertising, 53, 167; more widely used, 91; on farm, centralizer, 123, 167; on farm, and hogs, 169; tariff on, 212; history of, carried, 218; Jenkins against, 277; advertisement, 350
- Sex determination: editor interested, 61. See also Cattle breeding
- Shakespeare, William: quoted, 107; mentioned, 135
- Sheboygan County News and Market Reporter: history of, 347-48
- Sheffield Farms Company, 244
- Shelter. See Cattle, care of
- Shoemaker, E. R.: on cleanliness, 162; on oleo, 164; on preparedness, farm, 184-85; county agent, 186; tuberculosis, 219; editor, Kimball's Dairy Farmer, 286; policies as editor, 286-87, 290; editor, Creamery Journal, 289
- Shortening. See Butter; Cooking fats; Oleomargarine
- Shorthorn cattle: as dairy cattle, 14, 15-16; milking strain of, 63; going out, belief, 82, 102; at Columbian Exposition, 99, 100, 101; called dual-purpose, 106; demand, milking strain, 171; mentioned, 248
- Silo: praised by editors, 51-52; introduced, 52; editors favor use of, 52, 69, 107, 124, 172, 195-96, 201, 265, 280, 282, 286; some editors ignore, 69; crops, ensilage, 69, 265; advantages in using, 69, 172; claim, harbor bacteria, 119; winter dairying, 172; technical papers favor, 172; emphasis declines, 221; mentioned, 118
- Silver: free coinage of, 77
- Single-purpose cattle. See Cattle breeding; Dairy cattle; Dual-purpose cattle
- Skim milk, use of: for hogs, 169-70; more efficient, 191; editors comment, 337
- Skimming station. See Centralizer
- Skinner, John S.: begins American Farmer, 11; single-purpose cow, 11; on cleanliness, 12; editor, Monthly Journal of Agriculture, 16; supports theory of Guénou, 46; process butter, 122; mentioned, 118
- Slater, Edward K.: editor, Dairy Record, 115, 116, 291; biographical notes, 115, 291, 296-97, 382; northwest dairying, 152; editor, Butter, Cheese and Egg Journal, 177, 296, 383; prohibition, 217; buttermaking advice, 218; oleo, tactics, 236; butter marketing, 238; feeding, 265; cream grading, law, 267-68; cream collection, 268; managerial editors, 299; mentioned, 293
- Slocum, James, of American Creamery, 71, 72
- Socialism: associated with New Deal, 232; confused with union activity, 234
- Social problems: editors comment on, 179, 216
- Soft drinks: competition, 207
- Soil fertility: concern about, 38, 152; decline, shift to dairying, 152, 156, 169
- Soiling: advised, drought years, 107
- Sorenson, James, of Dairy Record, 195
- Sorghums: drought-resistant feed, 107, 118, 368
- South: dairying in, 144, 192
- South America: butter market, 126
- Southern California Milk Dealers' Association, 238
- Southern Dairyman (Georgia): begun, 203

- Southern Dairyman (Louisiana): begun, 203
- Southern Dairyman (Mississippi): begun, 335
- Southern Milk Products Journal: begun, 203
- South Pacific: copra from, 213-14
- Spaniards: as warriors, comments on, 131
- Spanish-American War: poisoned meat of, 126; editorial reaction, 130-31; mentioned, 133, 296
- Spanish Civil War, 248
- Specialization: growth of, 7-8, 43 158-59; influence of, dairy journalism, 298-99
- Speculation: in dairy products, 206
- Spencer, Herbert, 53
- Spencer, John E.: of National Dairyman, 76; Homestead strike, 81
- Stables. See Cattle, care of
- Stanton, John J.: owner-editor, Milk Reporter, 71; League of Nations, 182-83; British trade barrier, 183; milk distribution, 188-89; quotes John Stuart Mill, 189; canned cheese, 191; bovine tuberculosis, 201; consolidation in dairying, 210
- Starters: editors oppose use of, butter, 120, 146; oppose use in cheese, 197; editors sometimes approve, 245; used in West, 338. See also Bacteria; Buttermaking; Cheesemaking
- State aid to agriculture: societies, 8, 9; departments of agriculture, 10; in experiments, 20; in disease control, 32-33, 120, 241; oleo, 60; for dairying, 131-32. See also Federal aid; Federal laws; Price supports
- State laws: against oleo, 117, 122; tuberculosis, 139-40; cheesemaking, 141; cleanliness, 162; force editors into politics, 182; on ice cream, 197; hoof-and-mouth, 201; centralizers, 211; retailers, suggested on, 259; on cream grading, 267; Ice Cream Trade Journal, 294-95
- State regulations. See State laws
- Stationary Engineer, 294
- Stationary gasoline engine. See Gasoline engine
- Steamboats: importance of, 8
- Stern, Ben, 233
- Stevens brothers: buy Holstein-Friesian World, 287; breeders of Liverpool, N.Y., 380
- Stock and Dairy Farmer: begun, 177
- Stock and Dairy Gazeteer: history of, 321
- Stowe, E. A.: of Michigan Dairyman, 71; and American Cheese-maker, 71
- Strikes. See Labor problems; Milk strikes
- Subject matter, dairy journals: diversity of, 134, 180-81, 191-92, 218, 225, 239-40. See also Editorial policy; Information, source of
- Substitutes. See Cooking fats; Dairy Queen; Filled cheese; Filled milk; Oleomargarine
- Suburbs: growth, 173
- Successful Farming: absorbs Dairy Farmer, 137, 286
- Sulfanilamide: use of, noted by editors, 241, 242
- Sulphadiazine: uses of, 270
- Supply and demand, law of: editors defend, 230, 256; editors displeased with, 254. See also Economic theory
- Surplus, agricultural: editors have ideas on, 231-32, 256-57, 272, 367. See also Price supports
- Sutliff, Milo, 33
- Swiss cheese: history of, carried, 248
- Syphilis: and ice cream, 245
- TAFT-Hartley Act: editors favor, 258, 269, 270. See also Economic theory; Labor problems
- Tariff: editorial reactions to, 183, 212, 230, 263-64, 343; cream separators, 212; presidential discretion, 264. See also Foreign trade; Reciprocal trade agreements
- Taxes: editors comment on, 230; oleo, 235; income, advice, 251, 264. See also Grout Bill; Oleomargarine

- Technical information. See Butter-making; Cheesemaking; Condensed milk; Fluid milk; Ice cream manufacture
- Technical journals. See Dairy journals; Trade journals
- Technological advances: none, 25; farming, 39; press transmits, 51, 58, 161-62, 202, 289-90, 292, 298-99, 334; general, 54-55, 90-92, 150, 161-62; at Columbian Exposition, 97, 99; depression and, 131, 237, 243; changes dairy pattern, 167; verse, fluid milk, 190; distribution, 191; farm electricity, 223
- Tennyson, Alfred: quoted, 135; article on, 159
- Testing. See Babcock test; Cow testing
- Thompson, T. O.: editor, Dairy World, 44; forceful editor, 44, 299; enemy, 137; dual-purpose cow, 147-48; comment, Jenkins, 149; St. Louis World's Fair, 149-50
- Tick fever: Southern dairying, 192
- Tolstoy, Count Leo: nonresistance doctrine presented, 159
- Tractor: editor notes use, 195
- Trade, domestic: interest in, 18-19; dairy products, increases, 43, 72; Alaska, butter, 125; laws of, 205. See also Economic theory
- Trade, foreign. See Foreign trade
- Trade journals: conflict with farm journals, labor, 215-16; differ, price supports, 230
- Tradesman Company: publishers, American Cheesemaker, 71
- Transportation: general, importance, 8, 76, 116, 144, 192, 239; milk and cream collection, 144, 167, 268. See also Automobile; Railroads
- Treatment of cattle. See Cattle, care of
- Truman, Harry S.: unexpected election, 1948, 261
- Trusts: in agricultural commodities, 78; comment in press, 142, 174; editors see threat of, 188, 210; oleo charges butter trust, 165; mentioned, 48, 72. See also Monopoly
- Tuberculin test: discovered by Koch, 91; editorial response to, 91, 119, 120, 201, 277; importance, 92; farmer resistance to, 120, 219, 241. See also Koch, Robert; Tuberculosis
- Tuberculosis: bacteria isolated by Koch, 91; bovine-human relation, 91, 110, 149, 163, 201, 220; bovine, extent of, 92, 110; editors comment on, general, 110, 119, 163, 201, 219-20, 241, 297; eradication, editorial views, 110, 139-40, 163, 201, 219, 220, 241, 280; farmers resist efforts to eradicate, 110, 139-40, 163, 219, 241; compensated slaughter, government, 162, 163, 219, 241; mentioned, 33, 150
- Tucker, Luther: editor, Cultivator, 15; favors single-purpose cow, 15; founder, Genesee Farmer, 20; founder, Country Gentleman, 22; favors foreign purebreds, 22
- UNDERWOOD-Simmons Tariff: editorial comments on, 183
- Undulant fever: contagious abortion, 201; source of, 271. See also Abortion, bovine; Bacteriology
- Unemployment: editorial discussion, 231
- Union Farmer: begun, 227
- Unions. See Labor problems
- United Mine Workers: and John L. Lewis, 234
- Unrest: farmers' economic, 76-78
- Up-To-Date-Farmer. See Nebraska Dairyman and Up-To-Date Farmer
- Urban. See Cities, growth of; Cities, markets of; City; Metropolis
- Urner, F. G.: co-founder, New York Produce Review, 95
- Urner-Barry Corporation, 299
- U.S. Dairyman: history of, 44
- U.S. Employment Agency: editor supports, 186
- Utility. See Fluid milk; Public utility

- VACCINATION: for tuberculosis, 149; Bang's disease, 242
- Vegetable oils: replace animal fats, oleo, 213; in Dairy Queen, 260
- Vermont: dairying, 19; dairy journals founded in, 43, 74, 177
- Verse: usually in trade journals, 81; samples of, 16, 103, 104, 123, 135, 159, 162, 174-75, 189-90, 206, 328, 340-41, 364-65, 366; use of, 104
- Veterinary medicine: treatments, 17, 32, 91, 149, 241; editors carry advice on, 17, 91, 148, 201, 219-20, 241, 270-71
- Virginia: dairy journal founded in, 227
- Virus X, 270
- Vitamin D Milk: begun, 227
- Vitamins: discovery, 198; editors comment on, 199, 213, 221, 239; believed to have killed oleo, 213. See also McCollum, E. V.
- WAGES: high, influence of, 167; editors propose higher, 233-34; laws, dairy labor, 234; laws, wartime, 252; higher, editors oppose, 258, 270. See also Labor problems
- Walker, Ben: history, Hoard's Dairyman, 378
- Walker, R. M., of Western Reserve Farmer and Dairyman, 25
- Wallace, Henry C.: Farm and Dairy, 50, 75; Dairy Farmer, 50; Creamery Gazette, 96; dual-purpose cow, 127; journalistic practice, 129-30; volume numbering, 332
- Wallace, Henry, Sr.: antimonopoly, 75
- Wallace's Farmer: origin as dairy paper, 75; history of, 75; favors dual-purpose cow, 127
- War: editors comment on, 131, 142, 272; prosperity, 157
- War bonds: editors urge readers to buy, 185-86
- Waring, George: of Monthly Bulletin of the American Jersey Cattle Club, 45; supports Guénon, 46
- Washcoegg: begun, 203
- Washington: dairy journals founded in, 94, 177, 203, 347
- Wasson, J. D., of Cultivator, 14
- Watson, Elkanah: and agricultural fair, 9
- Webb, E. A., of St. Paul Dairy Reporter, 112
- Webster, Daniel: dairy specialist, 19
- Weld, Mason G., of Guernsey Breeder and Milk Journal, 57, 58
- West, growth, 7; vs. East, 40; Jenkins views it, 67; market for Guernseys, 67; dairying in, 78; dairy journals of, 123-24; farmers in, own scrubs, 148
- Western Confectioner-Ice Cream News: founding, 177
- Western Creamery: mentioned by Wallace, 130
- Western Farmer and Dairyman: history of, 137-38; policy of, 138; carries verse, 159; mentioned, 133
- Western Milk Dealer and Dairy Counselor: begun, 177
- Western Poultry and Dairy Journal: history of, 133, 342
- Western Reserve Farmer and Dairyman: history of, 25-26; contents, 25; mentioned, 6, 24
- West Virginia: dairy journals founded in, 74
- Westward movement: editors comment on, 38-39; mentioned, 7
- Wetheycomb, Dean: favors breed associations, 171
- White, B. D., of National Butter and Cheese Journal, 382
- Whitmore: editor, Northwest Dairyman and Horticulturist, 195
- Whittier, John G.: compared to Robert Burns, 135
- Whole milk. See Fluid milk; Milk
- Wilcox, E. D.: of Creamery and Dairy, 72; creamery information, 73
- Wiley, David: publisher and editor, Agricultural Museum, 11
- Willard, Xerxes A.: writer, Dairyman's Record, 27; editor, Dairy Farmer, 36; on cheesemaking, 36; activities as editor, 37; dairy

- prosperity in depression, 38;
biography of, 318; mentioned,
320
- Williams, Edward C.: of Ice
Cream Trade Journal, 142, 293;
biographical note, 294
- Willits, Burr: of Creamery Jour-
nal, 289; editorial policies, 290
- Willson, D. W.: of Elgin Dairy Re-
port, 72; pro-Bryan, 117; onbut-
termaking, 143; St. Louis Fair,
150; foreign trade, 183; Irish,
183; defends Elgin quotations,
191
- Wilson, Woodrow: editors criti-
cize, 183; on preparedness, 184
- Winfield Philosophical Club: and
Dairyman's Record, 26; and
Dairy Farmer, 31
- Wisconsin: dairy journals founded
in, 57, 93, 140, 177, 203, 322,
342, 347, 347-48
- Wisconsin Buttermaker's Associ-
ation: and Butter, Cheese and
Egg Journal, 296, 382
- Wisconsin Idea: on dairy cattle,
127
- Woman's Page. See Women
- Women: employed in creameries,
194; Woman's Page begun, 216;
special editorial concern about,
246-47; modern role of, 247
- Working Farmer: quoted, 30
- World economy: editors have
views on, 263-64
- World War I. See First World War
- World War II. See Second World
War
- YORK: dairy cattle, 14
- Youth Page: precursor noted, 216;
related to education, 217; in
breeder journals, 266, 278; in
Hoard's Dairyman, 280

UNIVERSAL
LIBRARY



118 742

UNIVERSAL
LIBRARY